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CONTRIBUTIONS

TO THE

SCIENCE OF MYTHOLOGY

BY THE

RIGHT HON. PROFESSOR F. MAX MÜLLER, K.M.

MEMBER OF THE FRENCH INSTITUTE

IN TWO VOLUMES

VOL. I

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OF THE TWENTY-FIVE YEARS JUBILEE OF

A PEACEFUL AND ILLUSTRIOUS REIGN

PREFACE.

I HAVE hesitated for a long time before making up my mind to publish these two volumes on the Science of Mythology. I was sorry, no doubt, that I should have to leave this gap in the work of my life as I had planned it many years ago, namely an exposition, however imperfect, of the four Sciences of Language, Mythology, Religion, and Thought, following each other in natural succession, and comprehending the whole sphere of activity of the human mind from the earliest period within the reach of our knowledge to the present day.

There is nothing more ancient in the world than language. The history of man begins, not with rude flints, rock temples or pyramids, but with language.

The second stage is represented by myths as the first attempts at translating the phenomena of nature into thought.

The third stage is that of religion or the recognition of moral powers, and in the end of One Moral Power behind and above all nature.

The fourth and last is philosophy, or a critique of the powers of reason in their legitimate working on the data of experience.

I have often explained how I thought that the Science of Mythology ought to be studied, but I regretted that neither time nor strength was left to me for doing what I had been allowed to do

for the other three sciences[1], namely to collect in a comprehensive form what I had written and what I still wished to say. We have all to learn the lesson when it is time for us to retire and to make room for younger and more vigorous workers. Nor is there any lack of young scholars who, if they thought there was any necessity for it, would be quite ready and quite able to defend the old fortress of Comparative Mythology, and would do it far more valiantly and efficiently than an old soldier of seventy-three years of age could ever hope to do.

But when I was told in so many words that as a defender of mythological orthodoxy 'I stood quite alone, a poor Athanasius contra mundum,' that all my followers and supporters had deserted me, and 'that the number of my victorious adversaries was legion,' I felt that this was really a personal challenge, and that, if possible, I should once more speak out myself, if only to show that such statements were not only unsupported by any facts, but were in glaring opposition to the facts as far at least as they

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[1] I. The Science of Language, two vols., last edition, 1891.
II. The Science of Religion,—
(1) Introduction to the Science of Religion, 1870.
(2) The Origin and Growth of Religion, 1878, } Hibbert Lectures.
(3) Natural Religion, 1888,
(4) Physical Religion, 1890,
(5) Anthropological Religion, 1891, } Gifford Lectures.
(6) Theosophy or Psychological Religion, 1892,
III. The Science of Thought, one vol., 1887.
Translation of Kant's Critique of Pure Reason, 1881; last edition, 1896.

are known to myself. It is easy to say such things in a number of daily papers, but they do not become true for all that. If, as happens sometimes, the same critic is on the staff of many papers, and has to supply copy every day, every week, or every month, the broken rays of one brilliant star may produce the dazzling impression of many independent lights, and there has been of late such a galaxy of sparkling articles on Comparative Mythology and Folklore, that even those who are themselves opposed to this new science, have at last expressed their disapproval of the 'journalistic mist' that has been raised, and that threatens to obscure the real problems of the Science of Mythology.

I have no doubt that the writer or writers of these articles are fully persuaded of their truth, but though they generally appeal to the enlightened opinion of the public at large, I feel convinced that they will consider the judgment of real scholars also as not entirely valueless or unworthy of their notice.

In what I am going to say I am not defending myself, though I am always represented, if not as the true founder, at all events as the only champion left to defend the Science of Mythology. I can therefore speak with all the more freedom and without fear of being considered egotistical. I am pleading pro domo, but not for myself. Scholars come and go and are forgotten, but the road which they have opened remains, other scholars follow in their footsteps, and though some of them retrace their steps, on the whole there is progress. This conviction is our best reward, and gives us that real

joy in our work which merely personal motives can never supply.

As so many names have been quoted to show that Comparative Mythology is dead, I venture first of all to quote a few names, but names of real scholars who have done valuable service in the cultivation of Comparative Mythology in the principal countries of Europe. Let us begin with Italy.

What would Mr. Andrew Lang say if he read the words of Signor Canizzaro in his 'Genesi ed Evoluzione del Mito,' 'Degli avversari il Lang ha ceduto le armi'? (See further on, p. 27.)

Let us proceed next to Holland. Professor Tiele, who had actually been claimed as an ally of the victorious army, declares:—'Je dois m'élever, au nom de la science mythologique et de l'exactitude . . . contre une méthode qui ne fait que glisser sur des problèmes de première importance.' (See further on, p. 35.) And again:—'Ces braves gens qui, pour peu qu'ils aient lu un ou deux livres de mythologie et d'anthropologie, et un ou deux récits de voyages, ne manqueront pas de se mettre à comparer à tort et à travers, et pour tout résultat produiront la confusion.' (p. 37.)

It is no doubt in Germany that the old or so-called effete school of Comparative Mythology counts the largest number of supporters, though it has also some formidable opponents there. But if we may accept Professor Brugmann as a worthy representative of the new school of Comparative Philology in Germany, we shall find that he, in the very first sentence of his Vergleichende Grammatik, represents Indo-Germanic Mythology by the side of Indo-Germanic

Grammar as the two constituent parts of Indo-Germanic Philology, which he defines as having for its object the study of the development of culture of the Indo-Germanic people from the time of their original community to our own time.

Turning to America, no one would object to the President of the Folklore Society, Mr. Horatio Hale, as a trustworthy judge and spokesman on this subject. He admits, indeed, that of late the ethnological school has enjoyed greater popularity than the linguistic school of Comparative Mythology, but how does he account for it? 'The patient toil,' he writes, 'and protracted mental exertion required to penetrate into the mysteries of a strange language and to acquire a knowledge profound enough to afford the means of determining the intellectual endowments of the people who speak it, are such as very few men of science have been willing to undergo.' (See hereafter, p. 30.) This cannot surely be said of Mr. Horatio Hale himself.

In France equally strong protests have been raised by such men as M. Michel Bréal and M. A. Barth, both Members of the French Institute, and M. Victor Henry, Professor at the Sorbonne. In answer to the often repeated notice of the premature death, and the solemn funeral of Comparative Mythology, Professor Victor Henry writes:—'Mais si l'on vous dit que l'école adverse est morte, n'en croyez rien. Si elle n'était pas bien vivante on ne la tuerait pas tous les jours.' (Hereafter, p. 32.)

As to M. A. Barth, who has been quoted as another of my many demolishers, whereas I had always looked

upon him as one of the most honest and most charming of my critics, he blames me indeed for my uncompromising opposition to the theory of a primitive fetishism. 'M. Max Müller,' he writes, 'n'a pas un peu le tort d'avoir trop raison.' I quite understand what he means, but I doubt whether he is fully aware of how much mischief is done by that easy bridge thrown across all the difficulties of the Science of Mythology, and how seriously it would interfere with the building of a more substantial and solid arch across the abyss that has to be bridged over by the students of mythology.

I cannot resist the temptation of quoting his words because they sum up, far better than I could do it, the principles that ought to guide us, and which I have defended with more or less success for nearly fifty years. I quote from his 'Bulletin de la Mythologie Aryenne,' in the Revue de l'Histoire des Religions, 1880, p. 109:—

'Mais, dans l'ensemble, personne ne conteste plus que les mythes, à l'origine, sont l'expression naturelle et populaire de faits fort simples; que les plus anciens notamment se rapportent aux phénomènes les plus ordinaires de l'ordre physique; qu'ils sont dans la dépendance la plus étroite du langage, dont ils ne sont très souvent qu'une forme vieillie; qu'il en est de leur immense variété comme de celle des mots, l'une se réduisant à un petit nombre d'éléments, l'autre à un petit nombre de racines; que, malgré leur fluidité et leur confusion apparente, ils possèdent une certaine cohésion et sont reliés par une logique cachée; qu'ils ne passent pas aussi

facilement, ni surtout d'une manière aussi désordonnée qu'on l'avait cru, d'un peuple à un autre peuple, d'une race à une autre race, mais que, comme le langage, ils ne se transmettent bien que par héritage, et qu'il y a des signes pour reconnaître les mythes d'emprunt, comme il y en a pour reconnaître les mots d'emprunt ; que, par conséquent, il est possible, d'une part, de les reconstruire même à l'inspection d'un seul fragment, à peu près comme à l'inspection d'un seul dérivé on restitue à une langue toute une famille de mots, et, d'autre part, d'affirmer d'un mythe, quand on le trouve chez deux ou plusieurs rameaux d'une famille ethnique, qu'il appartenait aussi à la branche d'où ces rameaux sont sortis, quand on le trouve chez tous les rameaux, qu'il appartenait déjà à la souche commune.'

I can subscribe to every word of this passage, which I doubt whether Mr. Lang, or Mr. Gladstone or Professor Gruppe could do, except that I hold that even if the same myth can be traced in two branches only, one belonging to the North-Western, the other to the South-Eastern division of the Aryan family, it must have existed before the Aryan Separation.

Were I to go on quoting scholar after scholar, I should become very tedious, I fear, and yet, not being any longer a reader of many journals or newspapers, I have referred to such papers only as were sent to me by their writers, and I have no doubt that many similar expressions of opinion have escaped me. I prefer therefore to wait till Mr. Lang or his friends can produce one single Vedic scholar

who is not convinced that the principles of Comparative Mythology, as laid down by Bopp, Grimm, Pott, Burnouf, and followed by Kuhn, Benfey, Grassmann, Schwartz, Mannhardt, Osthoff, Bréal, Decharme, Darmesteter, Roscher, Mehlis, Wackernagel, Meyer, Victor Henry, Barth, v. Schroeder, Bloomfield, Hopkins, Fay, Ehni, Oldenberg[1], and myself are right, however difficult it may be to carry them out so as to secure a unanimous assent. Surely, with such support behind me, I am not yet quite like Athanasius contra mundum, though even if I were, I should gladly say, Omen accipio.

There is one kind of criticism which is extremely useful, and for which I have always felt extremely grateful. No comparative mythologist can claim to be equally familiar with all the languages from which he has to draw his materials. If therefore the classical scholar corrects a mistake committed by a Sanskrit or Babylonian scholar, he deserves nothing but gratitude. But there has been of late an extraordinary recrudescence of that old classical orthodoxy which was rampant in the days of Bopp and Pott. Otfried Müller and Welcker would really seem to have written in vain. As in former days certain scholars hooted the idea that Greek and Latin grammar received its true light from Sanskrit, they now express their horror at the thought that any Greek deity could have its prototype in the Veda. They had indeed to swallow Dyaus

[1] I mention the names of those only who have kindly sent me their publications, and to whom, if I have not done so before, I return herewith my best thanks.

as the prototype of Zeus, but they are trying hard to imitate Kronos in the treatment of his children. The fact is that most of those who have criticised the work of Comparative Mythologists seem ignorant of the real objects of that new science. They repeat again and again that to the mind of Homer Zeus was not the sky, Apollon was not the sun, or Athêne the dawn. But no one, as far as I know, has ever said so. All that we hold is that as Greek and Sanskrit share a large number of words in common, words often very different in sound and very different in meaning also, they also shared the names of certain so-called Devas or Dii in common, although their names varied and their characters had been considerably changed. Greek scholars have had to learn that the Athêne of Phidias was preceded by the hideous archaic statues of the same goddess, nay that many of the Greek gods were represented at first by uncouth stones without a trace of human beauty. And yet we know now that there was an unbroken continuity between these rude idols and the master-works of Praxiteles. Why will they not learn the same lesson in Mythology? No doubt the Greek Zeus is separated by thousands of miles and thousands of thoughts from the Vedic Dyaus, yet the original concept of the two was one and the same. And this lesson that there was continuity connecting the first crude and barbarous attempts at expressing whether in wood, stone, or words, the first nascent ideas of divine powers, with the more recent creations of the poetry of Homer and the art of Phidias, was surely a lesson worth learning.

According to Plutarch (Quaest. Rom. lxxvii), some persons even in his time held that Zeus was the sun and Hêre the moon [1], but even in the Vedic hymns the gods are no longer identified with the natural phenomena from which they took their origin. No Comparative Mythologist would say that the Greek Athêne was the dawn; or if they did, all they could mean was that her name was originally a name of the dawn, that she took her being from the dawn, and then grew gradually into a goddess of light and wisdom in which all traces of the dawn had vanished, so that it was only a microscopic analysis of her name that could disclose her true birthplace. If Greek scholars will not learn these simple lessons, if they think they can help us in any way by simply saying that Zeus is very different from Dyaus, and Athêne from Ahanâ, they forget that this is the very position from which we start. The Brahmaputra is very different from the Ganges, the question is, can geographical research prove that both start from the same latitude. Have the Greek gods no antecedents, no source, rational or irrational, no raison d'être at all? That is the question of real interest, not whether in a comparison of Athêne and Ahanâ, a certain phonetic law has been contravened. If the geologists find one Ammonite among 'the first bones of Time,' they know at once that it is not a brute stone, but that its ribs and knobs mean former life and purpose. The same if the

[1] Δεῖ δὲ μὴ νομίζειν ἁπλῶς εἰκόνας ἐκείνων τούτους, ἀλλ' αὐτὸν ἐν ὕλῃ Δία τὸν ἥλιον, καὶ αὐτὴν τὴν Ἥραν ἐν ὕλῃ τὴν σελήνην.

mythologist finds the name of Dyaus in the hymns of the Veda, he knows that it is not a mere brute sound, but that there is reason and purpose in it. And as geologists, if they meet with Ammonites but slightly differing from each other in palæozoic and mesozoic rocks, feel convinced that they all had the same origin, may not the mythologists on meeting with Zeus in Greece, and with Jupiter in Rome, feel certain that Dyaus, Zeus, and Jupiter are the same word, and express the same thought, only with slight local differences of pronunciation? It has been said that Richard Owen could reconstruct the whole skeleton of an animal if he had only one tooth to work on; and is it so very strange then that a Comparative Mythologist, if he had only one Dyaus to start from, should be able to draw out the outlines of a whole intellectual period, of a whole system of thought, even if it had left us no more than this one Jupiter Ammon? Of course, if we imagine that Athêne sprang full grown and full named from the head of Zeus, or from the brain of Homer, there is an end of Comparative, nay of all truly scientific Mythology; but if there was growth in Aryan mythology as in Aryan language, then the nearer we can get to the germs and seeds, the better for us as intelligent students of the past. It is a most unfortunate idea of classical scholars to imagine that Comparative Mythologists have forgotten all their Greek and Latin, and cannot see the differences between Vedic and Homeric deities. They are taken to task for saying things which they never dreamt of, and after that nothing, of course, is

easier than to annihilate them. We are first made into targets and placed in position at about ten feet distance, and then there is great joy, because every arrow hits. Does Dr. Erwin Rhode (Psyche, p. 281) really imagine that the equation *S*arvara = Κέρβερος can be disposed of by the obiter dictum, that it is badly supported? The Vedic *Ri*shis had no Hades, no Styx, no Charon, no three-headed watch-dog. But if Kerberos is the same word as *S*arvara, the germ of the idea that afterwards developed into Kerberos, and into the dogs of Saramâ, must surely have existed before the Aryan Separation, and must be discovered in that nocturnal darkness, that sârvaram tamas, which native mythologists in India had not yet quite forgotten in post-Vedic times. What Dr. Rhode says about Kerberos being without a name in Homer, and named for the first time by Hesiod, was not quite unknown, and had, I thought, been fully explained by myself; but it seemed to me to confirm rather than to weaken my argument that Kerberos meant originally nocturnal, and became afterwards changed and personified in Greece as well as in India, and in each country according to its own fashion.

But while criticisms like those of Dr. Rhode or Professor Gruppe admit at all events of an answer, it is difficult to know what to do with those general charges which seem to be aimed at our moral character rather than at our linguistic qualifications.

It has, for instance, been broadly hinted that I had no right to quote scholars such as Mannhardt or

Oldenberg as my supporters. Much has always been made of Mannhardt's having changed his mind, and having left us, to become himself the founder of another school of Comparative Mythology. I have even been accused of intentionally ignoring or suppressing Mannhardt's labours. How charitable! Now, first of all, it is well known, and ought not to have been ignored, that Mannhardt, though for a time he expressed his mistrust in some of the results of Comparative Mythology, returned at last to his old colours, as may be seen from his instructive essay—not to use the journalistic terms of monumental, or epoch-making—Die Lettischen Sonnenmythen, published in 1875. Mannhardt died in 1880. All who knew Mannhardt know how much he was under the influence of Haupt, Scherer, and Müllenhof, and how much he tried to accommodate himself to the views of his friends and benefactors. This is what made him swerve for a time from the path traced out by Bopp and Grimm and Burnouf. But even then the work he did in collecting the popular customs and superstitions still existing in many parts of Germany, and dating, it may be, from the earliest mythological times, proved most useful to many students of Comparative Mythology. If I did not refer to his work in my former contributions to the Science of Mythology, the reason was simple enough. It was not, as has been suggested, my wish to suppress it (todtschweigen), but simply my want of knowledge of the materials with which he dealt, the popular customs and traditions of Germany, and therefore the consciousness of my

incompetence to sit in judgment on his labours. Surely each scholar has a right to restrict the sphere of his own work, and what necessity was there for me to praise or to criticise the labours of Mannhardt, when in England he had found so worthy an exponent and so eloquent a disciple as Mr. Frazer? Mannhardt's state of mind with regard to the general principles of Comparative Philology has been so exactly the same as my own, that I cannot resist the temptation of quoting at least a few passages from his latest letters.

When Mannhardt had published his Lettish Solar Myths (1875), he met Müllenhof at Berlin in 1876, and discussed the whole subject with him. Müllenhof had evidently imbibed his ideas of Comparative Mythology from the works of Dupuis, Schwenck, Hitzig, Claussen, or Nork, and had transferred the prejudice, caused by them, to the works of Bopp and Kuhn. No wonder that Müllenhof discouraged Mannhardt, and actually shook him in his convictions. But when Mannhardt had returned to his quiet home and his books and papers, he wrote on May 7, 1876, to his teacher and friend[1]:—'As it often happens in such discussions, the necessity of justifying myself in answer to your unexpected misgivings with regard to the whole of my Lettish Sun-songs, prevented me from confessing to you that I myself felt uncomfortable at the extent which Solar Myths threatened to assume in my comparisons, nay, that I felt it as a painful fiasco, because

[1] Mythologische Forschungen, p. xxv.

in opening this new point of view, materials seemed to rush in from all sides and to arrange themselves under it, so that the sad danger seemed inevitable of everything becoming everything.' [Are not these almost the same words which I used years ago when complaining of the omnipresent Sun and the inevitable Dawn appearing in ever so many disguises behind the veil of ancient mythology? And have I not gone through exactly the same phases of doubt which Mannhardt here describes, and struggled with the same perplexities? And have we not in the end arrived both at the same conclusion, so that I can without reserve subscribe to the concluding words of that indefatigable student of folklore and mythology?] 'All the more,' he continues, 'as I care for nothing but the discovery of truth, and as at the same time I attribute the greatest value to your judgment, I have allowed your and Scherer's hinted objections to pass again and again through my thoughts, in order to discover their true foundation. But as I could say to myself that neither of you could be so much at home as I am in these special researches, and that you could not have gone so carefully through my work as it deserves (this is not meant as any blame to you), I resumed courage, for after serious examination I felt convinced that in the main my labours have not been useless, nor uncritical. I am very far from looking upon all myths as psychical reflexions of physical phenomena, still less as of exclusively solar or meteorological phenomena, like Kuhn, Schwartz, Max Müller and

their school.' [Where has any one of us ever done this? We have explained a certain number of myths, as well as we could; not one of us has ever said that we had explained all myths, though at present I must confess with Mannhardt, that a far larger number of myths than I had formerly suspected have since rushed in and claimed their place as myths of a solar and auroral origin.]

'I have learnt to appreciate poetical and literary production as an essential element in the development of mythology, and to draw and utilise the consequences arising from this state of things.' [Who has not?] 'But on the other hand, I hold it as quite certain that a portion of the older myths arose from nature poetry which is no longer directly intelligible to us, but has to be interpreted by means of analogies. Nor does it follow that these myths betray any historical identity; they only testify to the same kind of conception and tendency prevailing on similar stages of development. Of these nature myths some have reference to the life and the circumstances of the sun, and our first steps towards an understanding of them are helped on by such nature poetry as the Lettish, which has not yet been obscured by artistic and poetical reflexion. In that poetry mythical personalities confessedly belonging to a solar sphere are transferred to a large number of poetical representatives, of which the explanation must consequently be found in the same (solar) sphere of nature. My method here is just the same as that applied by me to the Tree-cult.'

Where is there any difference between this, the latest and final system adopted by Mannhardt, and my own system which I put forward in 1856?

The one point where there is any real difference between him and myself is his remark that the solar myths which he has compared among different Aryan nations, do not betray any historical identity. This may be true with regard to solar myths like those that have been so well analysed by Sir George Cox and other followers of the Analogical School of Comparative Mythology; but it can hardly be said of myths in which the principal actors have actually the same name. Unless we suppose that the name of Zeus was formed independently of that of Dyaus, we must admit that Dyaush-pitar, Jupiter, and Zeus had the same historical origin, far beyond the beginning of our ordinary chronology; even though many of the stories told of them may be of much later growth. The idea, again, that there was a kind of marriage between the sun and the earth, and that the wealth of the harvest was the result of that union, has been met with in the traditions of the most widely distant races, entirely unconnected historically. But when we read of Îăsĭôn, the son of Zeus and Hêmera (dawn), who on the thrice-ploughed field became the husband of Dêmêter, the offspring of that marriage being called Ploutos, wealth, and when we recognise in Ιασίων the Vedic name of the sun, Vivasvân, i. e. *ϜιϜασϜων*, we can hardly doubt the real and historical identity of the Vedic and the Greek names of the Sun, as the husband of the Earth, and the son of the Sky

(Zeus) and the Dawn (Hêmera). It should also be remembered that while Sara*n*yû is the wife of Vivasvat, Dêmêter, the wife of Iasion, is sometimes called Erînys. Is all this mere chance? I need hardly add that though there is generally great confusion caused by the varieties of the name, such as Iasion, Iason, Iasos, Iasios, Iaseus[1], we ought always to distinguish between the names with short a, which belonged originally to the beloved of Dêmêter, and the names with long â peculiar to the lover of Mêdeia, originally a healer (ἰατρός), and therefore the pupil of Cheiron, i. e. Cheirourgos. Sometimes, however, the confusion of the names seems to have caused confusion in the myths told of Iăsion and of Iâson, so that occasionally it becomes difficult to disentangle the two clusters of Iasonic legends.

On this, however, as on other points, it would not have been difficult to come to an understanding with so conscientious and truth-loving a student as Mannhardt, and the fact that he sent me his last essay, Die Lettischen Sonnenmythen, Verehrungsvoll, shows, at all events, that he did not entertain for my mythological labours the supreme contempt which they have roused among those who profess to follow in Mannhardt's footsteps.

Lastly, as to the system followed by Professor Oldenberg, whatever may have been said in certain daily papers, I still think that I was perfectly justified in quoting him as belonging to our much-abused

[1] Usener, Götternamen, p. 156.

school of Comparative Mythology. As far as our fundamental principles are concerned, he is as loyal a member as I am myself of 'that school of physical allegorical interpretation which looks for the conception of the prominent Devas in sky, dawn, sun, sunset, moon, water, earth, cloud, clear air, lightning, or what not.' He would never hesitate to trace Zeus to the sky, Êos to the dawn, Hêlios to the sun, Selêne to the moon, Âpas to the waters or clouds, P*ri*thivî to the earth, Par*g*anya to the raincloud, Antariksha to the clear air, Apâm napât or Agni vaidyuta to the lightning, perhaps Aditi to 'What not'[1].

Those who are so anxious to represent him as a deserter, have evidently not read his book to the end, where, on p. 591, he recapitulates his remarks, and says: 'Most and the greatest of the gods (of the Âryas) are representatives of physical powers, thunder and storm, sun and moon, the morning and evening star, and the fire, the kindly friend in the houses of men.' He adds, what I have myself so often insisted on, that in the case of many of these physical gods the original traits of their character have become vague and faded, and a long development has often loosened, nay severed their connection with the physical substrata from whence they arose.

What can be the object of misrepresenting facts which can be so easily verified either by a reference

[1] See Oldenberg, l. c., p. 39 seq., 'God and demons in their relation to nature and the other substrata of mythical conception.'

to published books or by a letter to their author at Kiel? Would not honest work and mutual help be far more beneficial than forensic ingenuity and journalistic eloquence?

No one would blame Prof. Oldenberg and others for having occasionally looked to the mythology of savage races to see whether they offer analogies and possibly explanations of Vedic myths. Must I not plead guilty as one of the oldest offenders in that respect myself? But in O.'s case, we may at all events feel certain that whenever he tries to illustrate Aryan by Non-Aryan myths, or the customs of Vedic *Ri*shis by the accounts of travellers among savage races, he has never done so without that critical circumspection and hesitation which distinguish his other researches. Even when I have differed from him, it may be my own fault, as I do not lay claim to that scholarlike knowledge of the languages and traditions of savage tribes which alone could enable me to form an independent judgment of the labours of others. All I maintain against him is that we ought first to try to explain Vedic words and Vedic customs from Vedic and Aryan sources, before we turn for help to the Red Indians of America. Whatever primeval heirlooms the Vedic *Ri*shis may share in common with Australian Blacks, may they not have invented some of their myths after they had left the period of primeval savagery? I doubt whether even on this point Professor Oldenberg would greatly differ from me. For instance, I still think that a careful analysis of the growth of meaning in such words as Brunst and Inbrunst,

burning and suffering, breeding and brooding, will throw more light on the different phases of tapas in the Veda than a reference to the wild contortions and plentiful perspiration of Shamans in their orgiastic ravings. But by all means let us have as much light as possible, from whatever quarter of the world it may come, only let us have trustworthy authorities, and chapter and verse for the names, the legends and customs of each savage race that is supposed to supply us with a background for the ceremonial as taught in the Brâhma*n*as and Sûtras, though but seldom in the more ancient hymns of the Sanhitâs of the three Vedas. It seems to me difficult to explain how the oldest Vedic period should thus have been skipped, and how this primordial Shamanism should suddenly come to light in the later periods only. However, I have never found any difficulty in coming to an understanding with Professor Oldenberg as a fellow-worker, and even when we differed we could understand the reason why, and could in the end agree to differ.

All this is so obvious that I know I shall be blamed by my friends in Germany for saying so much about it. They hold and hold rightly that true science has nothing to do with personalities, or with ephemeral reviews, whether signed or unsigned. But public opinion is different in England, and it has been looked upon almost as a crimen laesae majestatis that I should not have replied by name to Mr. A. Lang and other busy writers. Nay, I have lately been told in return and with an air of great triumph that there is one book professedly

'not on personal Greek religion, but on Greek cult[1],' and written 'by a scholar who gives up the contradictory systems of Greek mythological interpretations that rest on the philological analysis of proper names,' and that in the whole of it my name is never mentioned. This, no doubt, is supposed to settle all questions, but if Dyaus has survived the indignity of having been ignored, and rightly ignored, in a book on the Greek cults, written by a scholar who knows the value of discretion, have I any reason to complain, particularly when I see my name so often quoted in books on the cults of Hottentots and Bushmen? How useful it would be if other scholars would follow his excellent example, and confine their critical remarks to languages of which they know at least the alphabet and grammar.

I cannot conclude this preface without expressing once more my regret at the many imperfections which I have no doubt will be discovered in these two volumes. Old age brings weak sight, possibly weak insight also, and I had for the first time to depend on younger eyes to read my proof-sheets. My thanks are due to Professor J. Wright, Dr. Lüders, and Dr. Winternitz for the help they have rendered me.

In writing Sanskrit or Greek names, I have marked the long vowels by â, ê, ô, in all cases where the etymology of the name depends on the length of the vowels. I write therefore Têthys, but Thetis, Themis. I do not mark the final vowels because their quantity admits of no doubt. Hence

[1] See Cosmopolis, September, 1896, p. 685.

I write Hêrakles, Hermes, Hêre or Hêra, Selêne, Aphrodîte. Though sometimes this sign of the length of a vowel may have been omitted, I hope it may not have been so in cases where it could cause any ambiguity.

I am much afraid also that many a book or essay on Comparative Mythology published in Germany, France, Italy, Russia, may have escaped my notice. Professor Usener's recent book, 'Götternamen,' reached me too late, but I have read it with much interest and advantage, because it opened new and wide views on the origin of Aryan names and myths, and strongly confirmed my views on the great latitude in the choice of the derivative suffixes of mythological names. Even though I cannot agree with all his conclusions, any contribution from a real scholar is always welcome and will always prove useful.

As these contributions to the Science of Mythology were written from time to time, I found that they contained frequent repetitions.

If other people have complained of the pages of our opponents swarming with fetishes, totems, and all the rest, I am afraid they will now return the compliment and complain of the constant appearance and reappearance of Dyaus, Deva, Varu*n*a, Saramâ, &c., in the pages of these volumes. Many of them I have tried to remove, others, however, had to remain, partly because the context would have been broken by their removal, partly because though the subject was the same, it was treated in different places with a different purpose.

If it is thought, however, that I should have been

more merciless in pruning my manuscript, I must plead guilty, and I have nothing to say in my defence except that I had to answer the same objections, repeated year after year, and that it requires more than one blow to drive a nail through a thick block.

It is not likely that I shall be able to enter again on any controversy with regard to the facts and opinions put forward in this work. I leave what I have written, such as it is, to my friends and fellow-workers, grateful beforehand for any real corrections and improvements they may have to propose, and convinced that in however small a degree my book will help towards a better understanding of one of the most ancient and most instructive phases in the historical evolution of the human mind, during its progress from mythological stammerings to the clear enunciation of religious and philosophical truth.

Whoever recognises in mythology the last traces of a poetical conception of the solemn drama of nature, is on our side, and whatever the grammar and literature may be which he chooses for his own special study, whether those of Babylon or Egypt, of Lets or Fins, of Maoris or Mincoupies or Mincopies, if he can draw from them any contributions towards the elucidation of our own ancient Aryan myths, he will be welcomed as a useful ally and as a worthy fellow-labourer in an enterprise, I hope not altogether inglorious or barren of solid results.

F. M. M.

OXFORD,
September, 1896.

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CONTRIBUTIONS

TO THE

SCIENCE OF MYTHOLOGY.

CHAPTER I.

RETROSPECT.

The Beginnings of Comparative Mythology.

It may be asked why for so many years, during which ever so many books and articles have been published expressing undisguised contempt for Comparative Mythology, as understood by Sanskrit, and more particularly by Vedic scholars, and conveying the strongest condemnation of all the etymologies and mythological equations which had been proposed by myself and other comparative philologists, I should have remained silent and allowed the clamour to grow stronger and stronger.

All I can answer is, that for years I have been very busy with work to which I felt in honour pledged. But I must confess also, though it may seem very wrong, that I could not help watching and, to a certain extent, enjoying the hubbub all around, the shouts of defiance and the paeans of victory raised by the attacking forces, feeling

perfectly safe all the time in my fortress, and not at all inclined for a sortie. It was really amusing to see how many of the shots aimed at the good vessel of Comparative Mythology fell right and left, because the hostile crew had not even ascertained my true position, had misunderstood my course, and had thought me anxious to defend points which lay completely outside the sphere of my own operations. Nay, it sometimes happened that shots were fired at my vessel by a crew bent on exactly the same object as myself, by men who imagined that I stood in their way, while I was really as helpful to them as they were to me. I feel to-day the same unshaken confidence in Comparative Mythology which I felt when, as a student at Berlin in 1844, I enjoyed the privilege of listening to the lectures of Bopp and Schelling, and when afterwards, at Paris, I was allowed to attend the brilliant Cours of Eug. Burnouf at the Collége de France, and to watch the ingenious combinations by which that eminent scholar arrived at his marvellous discoveries in comparing the myths of the Rig-veda with those of the Avesta, showing by irresistible arguments the transition of mythological characters in these two sacred books into the epic and pseudo-historical figures of the Shâhnâmeh. Whatever may have been said against the process by which in other countries gods were changed into heroes, the equivalence of Vedic and Avestic names with those of the heroes of the Shâhnâmeh, of Yama and Yima-Kshaêta with Jamshîd, of Traitana and Thraêtaona with Ferîdûn, of K*ri*sâsva with Keresâ*s*pa and Gershâ*s*b, is as safe now as it was when it was first proclaimed by Burnouf in his lectures at the Collége de France.

Mr. Herbert Spencer, &c.

I have been told, both in public and in private, that it was hardly civil to leave the criticisms of such men as Mr. Herbert Spencer and Mr. Andrew Lang unnoticed and unanswered. My own feeling, however, has always been that more harm than good is done by personal controversy. Some of the opinions put forward by my critics have been discussed by me again and again; only that, as in many cases they had been put forward by other philosophers long ago, I preferred to treat them impersonally and without special reference to their latest or loudest advocates. I must confess also that I felt considerable difficulty how to deal with some of their criticisms, or rather witticisms, without seeming either harsh or discourteous. I have always admired Mr. Herbert Spencer as a hard worker and as a hard thinker, I admire Mr. Andrew Lang as a charming poet and brilliant writer. But what could I say if the former told me that 'the initial step in the genesis of a solar myth would be the existence of human beings named Storm and Sunshine.' Without consulting Prehistoric Postal Directories I could not, of course, prove a negative and show that in remote ages there never lived a Mr. Sun and a Miss Dawn, that this Mr. Sun never persecuted Miss Dawn with his attentions, and that Miss Dawn never fainted away or died in his embraces, like Daphne in the arms of Phoibos, or was changed into a daphne, a laurel tree. Nor did the help offered by Mr. Lang seem to me much more valuable for solving our difficulties. Every-

body knows that there is hardly a country where the belief of human beings being changed into stones, flowers, or trees, has not been met with. But how does that help us in accounting for the special stories of Daphne, or Myrrha, or Narcissus? The question that has to be answered is not why such stories were told in Mangaia, but why the story was told in Greece, and why of Daphne, Myrrha, or Narcissus?

Story of Tuna from Mangaia.

Mr. Lang, as usual, has recourse to savages, most useful when they are really wanted. He quotes an illustration from the South Pacific that Tuna, the chief of the eels, fell in love with Ina and asked her to cut off his head. When his head had been cut off and buried, two cocoanut trees sprang up from the brain of Tuna. How is this, may I ask, to account for the story of Daphne? Everybody knows that 'stories of the growing of plants out of the scattered members of heroes may be found from ancient Egypt to the wigwams of the Algonquins,' but these stories seem hardly applicable to Daphne, whose members, as far as I know, were never either severed or scattered.

I must dwell a little longer on this passage in order to show the real difference between the ethnological and the philological schools of comparative mythology.

First of all, what has to be explained is not the growing up of a tree from one or the other member of a god or hero, but the total change of a human being or a heroine into a tree, and this under a certain provocation. These two classes of plant-

legends must be carefully kept apart. Secondly, what does it help us to know that people in Mangaia believed in the change of human beings into trees, if we do not know the reason why? This is what we want to know; and without it the mere juxtaposition of stories apparently similar is no more than the old trick of explaining ignotum per ignotius. It leads us to imagine that we have learnt something, when we really are as ignorant as before.

If Mr. A. Lang had studied the Mangaian dialect, or consulted scholars like the Rev. W. W. Gill—it is from his Myths and Songs from the South Pacific that he quotes the story of Tuna—he would have seen that there is no similarity whatever between the stories of Daphne and of Tuna. The Tuna story belongs to a very well-known class of aetiological plant-stories, which are meant to explain a no longer intelligible name of a plant, such as Snakeshead, Stiefmütterchen, &c.; it is in fact a clear case of what I call disease of language, cured by the ordinary nostrum of folk-etymology. I have often been in communication with the Rev. W. W. Gill about these South Pacific myths and their true meaning. The preface to his collection of Myths and Songs from the South Pacific was written by me in 1876; and if Mr. A. Lang had only read the whole chapter which treats of these Tree-Myths (p. 77 seq.), he would easily have perceived the real character of the Tuna story, and would not have placed it in the same class as the Daphne story; he would have found that the white kernel of the cocoanut was, in Mangaia, called the 'brains of Tuna,' a name, like

many more such names, which after a time require an explanation.

Considering that 'cocoanut' was used in Mangaia in the sense of head (testa), the kernel or flesh of it might well be called the brain. If then the white kernel had been called Tuna's brain, we have only to remember that in Mangaia there are two kinds of cocoanut trees, and we shall then have no difficulty in understanding why these twin cocoanut trees were said to have sprung from the two halves of Tuna's brain, one being red in stem, branches, and fruit, whilst the other was of a deep green. In proof of these trees being derived from the head of Tuna, we are told that we have only to break the nut in order to see in the sprouting germ the two eyes and the mouth of Tuna, the great eel, the lover of Ina. For a full understanding of this very complicated myth more information has been supplied by Mr. Gill. Ina means moon; Ina-mae-aitu, the heroine of our story, means Ina-who-had-a-divine (aitu) lover, and she was the daughter of Kui, the blind. Tuna means eel, and in Mangaia it was unlawful for women to eat eels, so that even now, as Mr. Gill informs me, his converts turn away from this fish with the utmost disgust. From other stories about the origin of cocoanut trees, told in the same island, it would appear that the sprouts of the cocoanut were actually called eels' heads, while the skulls of warriors were called cocoanuts.

Taking all these facts together, it is not difficult to imagine how the story of Tuna's brain grew up; and I am afraid we shall have to confess that the legend of Tuna throws but little light on the legend

of Daphne or on the etymology of her name. No one would have a word to say against the general principle that much that is irrational, absurd, or barbarous in the Veda is a survival of a more primitive mythology anterior to the Veda. How could it be otherwise?

The Proper Use of the Mythology of Uncivilised Races.

But when we come to special cases we must not imagine that much can be gained by using such general terms as Animism, Totemism, Fetishism, &c., as solvents of mythological problems. To my mind, all such general terms, not excluding even Darwinism or Puseyism, seem most objectionable because they encourage vague thought, vague praise, or vague blame.

It is, for instance, quite possible to place all worship of animal gods, all avoidance of certain kinds of animal food, all adoption of animal names as the names of men and families, under the wide and capacious cover of totemism. All theriolatry would thus be traced back to totemism. I am not aware, however, that any Egyptologists have adopted such a view to account for the animal forms of the Egyptian gods[1]. Sanskrit scholars would certainly hesitate before seeing in Indra a totem because he is called v*ri*shabha or bull, or before attempting to explain on this ground the abstaining from beef on the part of orthodox Hindus.

Dr. Codrington on Totems.

But we see now how even those who are considered as the highest authorities on the myths and customs of savage races, protest against the importa-

[1] See Maspero, Dawn of Civilisation, p. 103.

tion of totemism into their special fields of study. Where are the totems? Dr. Codrington asks (p. 32). In the Polynesian islands, as he has shown, each kema (kindred) has its buto or abomination, which its members must not approach, behold, or eat. In one case, but in one case only, this buto has the same name as the kema, so that the kakau clan must not eat the kakau crab. Members of another kema however, the Manukama, are at liberty to eat the bird from which they derive their name, and possibly their descent. Dr. Codrington asks whether it would be right to use such cases as proving that totemism existed among Polynesians and Melanesians; and he shows in how many different ways their customs can be explained, and have been explained, by the natives themselves[1]. He points out that the thing which it is abominable to eat is never believed to be the ancestor, certainly never the eponymous ancestor of the clan. In fact Dr. Codrington concludes that these butos may indeed throw light upon the origin of totems elsewhere, but can hardly give a home to totems in the Solomon Islands. He quotes a case, when a man who recently died declared that after his death he would be in the banana, and when in consequence, the banana became abomination (buto), was never eaten, and would probably in time become an ancestor.

Professor Hopkins, who cannot be suspected of any prejudice against agriological studies, and who is well acquainted with the totems of the Red Indians, protests against the promiscuous use of this

[1] The Melanesians, p. 32.

mythological solvent, even in the hands of a scholar such as Professor Oldenberg. 'Our learned author,' he writes [1], 'who is perhaps too well read in modern anthropology, seems to give the absolute dictum that animal names of persons and clans imply totemism. This is no longer a new theory. On the contrary, taken in so universal an application, it is a theory already on the wane, and it seems to us injudicious to apply it at random in the Rig-veda. As a means of explanation it requires great circumspection, as is evinced by the practice of the American Indians, among whom it is a well-known fact that animal names not of totemistic origin are given, although many of the tribes do have totem-names.'

This shows how careful we ought to be before we generalise the meaning of totemism, and try to explain by it anything that seems like it, whether in the metaphorical language of the Veda, the theriolatry of ancient Egypt, or the modern belief in butos in the Solomon Islands.

That mythologies, even those of Greeks and Romans, may contain survivals or memories of a previous state of savagery had been observed by Vico, Fontenelle, and other philosophers, long before our own time. As a general truth no one doubts that men must have been children, and that civilised people must once have been uncivilised. The question which we should like to ask is, Which are the thoughts and words in the Veda that remain unintelligible unless they are accepted as survivals from the very infancy of the human race, from the thoughts of what is called primitive humanity,

[1] American Orient. Soc. Proceedings, December, 1894, p. cliv.

thoughts which we are asked to study in the conversation of uncivilised races of the present day. Let us have these cases one by one, and we may then arrive at something tangible and useful. It is easy to say that, because some savage races have no numerals beyond three or four, therefore the Âryas too had originally no more than three or four numerals. We cannot prove that it was not so, but what can be gained by such possibilities? We might say that the nudity of the statues of some of the Greek gods is a survival of the nudity of the Andaman islanders. But we ought not to forget that the Greek Graces were draped before they were represented as naked. History, in these questions, has at least as much right as evolution with its 'imperceptible degrees.' In India we know nothing older than the thoughts and words of the Veda, we do not know the savage ancestors of the Vedic poets, though no one would ever deny their potential existence. No one has ever represented the Vedic *Ri*shis as coming fresh from the hands of their Maker, still less as the missing link between beast and man. There are hundreds of rings within rings, as I have often said, in the language of the Veda, and the same applies, of course, to its mythology. If you scratch the *Ri*shi, you may find the savage, but scratching the *Ri*shi is a difficult process; and it certainly requires some knowledge of Sanskrit Grammar, nay, even of phonetic laws, to prevent us from mistaking, as some have done, Sûryâ, fem., for Sûryas, masc., as if Luna for Lunus. The modern Mincoupie also, if scratched, might reveal the really primitive savage; but here, too, the process of scratching is by no means easy,

and even then the skinned Mincoupie, though in some respects like the skinned *Ri*shi, might turn out very different from his Indian brother. I have not a word to say against our cross-examining savages, though they are apt to say and to do everything which they are required to say and to do. But I cannot understand why Mr. Andrew Lang should be so anxious to represent me as his adversary or himself as my adversary. I am not his adversary; he says himself that I have never even quoted his name or entered on any personal controversy with him. Nor have other ethnologists looked upon me as their adversary. I have had the honour of being elected President of the Ethnological Section of the British Association in 1891. I had done some work, little as it may seem to Mr. A. Lang, in comparing savage traditions with those of Greeks and Romans and Hindus. But this was in the early days of Comparative Mythology, and long before Mr. A. Lang had joined our army. If afterwards I gave up this kind of work, it was simply because I saw that others, by their scholarlike knowledge of the languages, were far better qualified for it. But what has all this to do with Comparative Mythology as studied by Benfey, Pott, Kuhn, Mannhardt, Grassmann, Bréal, Darmesteter, Osthoff, Roscher, Mehlis, Meyer, Decharme, Victor Henry, Barth, v. Schroeder, Bloomfield, Hopkins, Fay, and many more? Surely whatever we may think of the mythology of vanished or surviving savages, there is plenty of mythology that has sprung up since the Âryas ceased to be savages, just as there are plenty of words in Sanskrit and in the Bântu languages which were formed from time to time from roots, and not from onomatopoeia.

It is quite possible that words for cuckoo and dog may be the same in India and in Central Africa, but hardly the words for sky, sun, and moon. Now, as little as the Bântu languages will help us to understand the formation of words like coelum, sol, or luna, are the present myths and customs of the Iroquois or Kafirs likely to help us to a thorough understanding of Zeus, Athêne, or Aphrodîte. Let Mr. A. Lang discover as many general parallels as possible between the mythology of the Maoris and of the Greeks. They will all be welcome, and to none more than to myself; but when Sanskrit scholars discuss the etymology of Vedic names, or Greek scholars the etymology of Greek names, he may, indeed, if he likes, stand at a distance and smile at the differences of opinion between them. It is quite true that they differ on certain points, but he ought not to forget that they differ no more than others who cultivate any progressive science, no more than Political Economists, Egyptologists, Electricians, Theologians, nay even Anthropologists [1]. In several cases, however, these differences which disturb Mr. Lang, are simply due to the fact that people so often use the same words, but in different senses.

The Meaning of 'Primitive.'

When I speak of the Vedic *Ri*shis as primitive, I do not mean what Mr. A. Lang means when he calls his savages primitive. His savages belong to the nineteenth century A. D., mine, it may be, to the nineteenth century B. C. But for all that if he

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[1] Gifford Lectures, iii, p. 413, Appendix v, The Untrustworthiness of Anthropological Evidence.

thinks that the language, the customs, and myths of the Fijians are more ancient than those of the Vedic *Ri*shis, I have nothing to say against it. We comparative mythologists begin with whatever of real mythology we find among the Aryan nations, and try to trace it back to its origin, but we never say that this origin carries us down to the beginning of the world or to the seventh day of creation. All that we gladly leave to the Agriologists. What we call primitive in Aryan mythology is, as I have often tried to explain, what is oldest within our reach; it is little more than what might be called natural, rational, or intelligible, something, in fact, that had its beginning in itself, and does not require any further antecedents.

We assert nothing about chronology, and if the students of savage ethnology were to postulate millions and millions of years before the formation of the word Dyaus or Zeus, we should gladly grant them. But most of the instances that have been produced to show that savages have older gods than Zeus, and that Vedic myths are merely survivals of savage myths, have hitherto failed to convince any real scholars.

Kronos and his Children.

It has often been quoted, for instance, as a great triumph of Agriology that it can account for the swallowing of his children by Kronos by a reference to the existence of cannibalism among the distant ancestors of the Aryan race. I do not see how this can help us much. Can we possibly cut the myth of Kronos in pieces and separate the swallowing from its after-effects? And for

these, the bringing up of the stone and of his children, even the most distant periods of savagery would hardly offer any satisfactory analogy. I do not say that we comparative mythologists can throw much light on the myth of Kronos; still, if we remember the different meanings of swallowing, we may possibly be able to account not only for the swallowing of all the celestial gods by Kronos, but likewise for their being brought up again the next morning. Suppose we could discover in Kronos some meaning like Evening or Winter, would not the whole Kronos myth, including the return of the gods, be solved at once? I quite admit that hitherto etymology has not helped us much to an interpretation of Kronos. There are certain deep strata of language which even etymology cannot reach, at least not with its present tools. But does it not show the importance of etymology if, as in this case, our acceptance of the original meaning of a myth would stand or fall at once with the etymology of a proper name, the name of Kronos?

Suppose Kronos could be proved, as Welcker tried to show, to stand for Chronos, 'time,' or suppose that the word for 'time' meant originally 'night' (compare such words as kshapâ, kshaṇa, &c.), would not the whole myth of Kronos, both in his swallowing the bright gods and giving them up again, become transparent? I do not commit myself to this explanation, but may it not stand by the side of the cannibal theory? See hereafter, p. 167.

Fontenelle.

I do not object to ethnological experiments being made for the elucidation of mythology, I only wish we had been more successful in them. But in his

skilful unravellings of the old tangle of mythology, even Mr. A. Lang[1] has to admit, that we have not got much beyond Fontenelle, when he wrote in the last century :—

'Pourquoi les légendes des hommes, des bêtes, et des dieux sont elles à tel point incroyables et révoltantes ? . . . . La réponse est que les premiers hommes étaient dans un état de sauvagerie et d'ignorance presque inconcevable et que les Grecs ont reçu leurs mythes en héritage de gens qui se trouvaient en un pareil état de sauvagerie. Regardez les Cafirs et les Iroquois si vous désirez savoir à quoi ressemblaient les premiers hommes'—

and then follows the very important caution—

'et souvenez-vous que les Iroquois mêmes et les Cafirs sont des gens qui ont derrière eux un long passé.'

There is not a word of Fontenelle's to which I should not gladly subscribe, there is no advice of his which I have not tried to follow in all my attempts to explain the myths of India and Greece by an occasional reference to Polynesian or African folklore. But it is one thing to lay down a general principle, another to carry it out in detail. To do that required, as I have always said, not only the pleasant reading of the works of men like Callaway, Hahn, Gill, and Codrington, or of such excellent digests as Bastholm, Waitz, and Tylor have placed before us ; it required an independent study of the languages, and for that I had neither time nor strength after what I felt bound in honesty to do for Sanskrit, Greek, and Latin.

Fontenelle was certainly a man of uncommon com-

[1] A. Lang, Mythes, Cultes et Réligion, p. 618.

mon sense, but something more than common sense is required for the study of prehistoric antiquities. We know, or ought to know by this time, a little more than Fontenelle and his contemporaries. We know that no literary work, neither the Old Testament nor the Veda, can represent to us the very beginnings of religious or mythological thought. Neither the Old Testament nor the Veda is so old as was once supposed, neither of them lays claim to represent to us 'humanity as emerging slowly from the depths of an animal brutality.' The savage does not stand on the heels of the Vedic *Ri*shis. Whatever date we may assign to the earliest of the Vedic hymns, there are at least two long periods between the Veda and downright savagery and cannibalism. The Vedic period presupposes the Indo-Iranic, the Indo-Iranic the Pan-Aryan period. These periods, though commonly called prehistoric, are perfectly historical in one sense, inasmuch as they have left us in their language historical documents of perfect authenticity. We know, for instance, that during the Indo-Iranic period the worship of so peculiar a deity as Soma had been fully established, we know, to mention nothing else, that during the Pan-Aryan period the numerals from 1 to 100 had been formed and accepted. If then we are told, on the other side, that there are even now savage tribes that cannot count beyond three or four (though I doubt it), it can easily be seen that the savage is not so very close on the heels even of the original Âryas, and twice removed even from a Vedic age. Yet although those who follow Darwin know that homo sapiens forms but one species, and that the Andaman race is as old

as any other, Fontenelle, no doubt, was right when he maintained that civilised races had once been uncivilised, and that the customs and myths of uncivilised races may therefore throw light on those of civilised nations. Only let us remember the periods of evolution that intervene between the Veddah and the Veda, and let us not attempt to identify what was the work of the Pan-Aryan, the Indo-Iranic, and the Vedic periods with the chaotic savagery that lies beyond. If we hesitate before identifying Varuna and Ouranos, let us not rush at the conclusion that every tribe which has an animal name derived that name from a Totem.

Comparative Mythology founded on a Comparison of Names.

If, therefore, I declined to be drawn into any personal controversy with Mr. Andrew Lang or Mr. Herbert Spencer, it was not from any lack of respect—far from it; it was because I looked upon them both as protagonists in their own spheres of work, but not as antagonists of mine. I felt perfectly confident that the principles of linguistic mythology were safe and sound, and required no defence against ephemeral criticism, or what has been spoken of as journalistic mist[1]. What Dr. Osthoff declared in 1869, 'Nominum congruentiam certissimum fundamentum esse, quo omnis mythologia comparata niti debeat' (Quaestiones Mythologicae), I hold to be as true to-day as it was then; and it is well known that in his last, nay posthumous

[1] Athenaeum, April 4, 1896.

essay, Mannhardt, no mean authority, returned to the same conviction[1].

I knew then, and I know now, that Comparative Mythology, whatever its youthful errors might have been, has a future before it that will surprise its most determined adversaries. Though I had other work to do which for many years required the whole of my time and attention, my interest in Comparative Mythology has never flagged, and I have followed the labours of others in this wide field of research with unabated sympathy. So long as linguistic Comparative Mythology had the support of all really competent scholars, I mean of those who could read Sanskrit and the Veda, I felt perfectly satisfied. I was not in the least frightened even by being called 'Athanasius contra mundum.' I gladly accepted the omen, having always, like Athanasius, cared for the good opinion of the electi rather than of the mundus. But how, with any regard for facts, it could be said that after the death of many of my former fellow-workers, I stood now quite alone, has been a puzzle to me. Of the long list of names given on page 11, many, no doubt, are gone, but many remain, and I am not yet reduced to the same straits as poor Athanasius. Even when I was told that the number of the adversaries of Comparative Mythology was Legion, my heart did not fail me, for I trusted that in time even Legion would be sitting clothed and in his right mind. Nor have I ever been able to extract from my critics the title of a single book in which my etymologies and

[1] See Mannhardt, Mythologische Forschungen, 1884, pp. 86, 113.

my mythological equations had been seriously criticised by real scholars. Mistakes, no doubt, were made by Bopp and Grimm and Pott, but Comparative Philology has survived nevertheless, and should we have had Comparative Philology without their mistakes? Mistakes have likewise been made by Kuhn, by myself, and by some of my pupils and followers, but these mistakes, committed in the first enthusiasm of unexpected discoveries, have been corrected, while the broad outlines of Comparative Mythology have remained intact. And is it quite fair, I may ask, when any German professor differs from me, to conclude at once that I am wrong and he is right? All this does very well for journalistic purposes, but hardly in the pure and fresh air of real scientific research. The number of real labourers has indeed been small, but this was but natural, for, as I pointed out from the first, no one could possibly do any independent work, and I should add, no one could form any independent judgment of the discoveries made by others in this newly-opened field of linguistic research who was not a Sanskrit, nay, who was not a Vedic scholar.

Gervinus and Haupt.

It is extraordinary how, beginning with Gervinus, a number of persons, more or less distinguished in their own special spheres of study, have stepped out of their proper sphere and boldly, nay recklessly, pronounced judgment on the labours of men such as Kuhn, Benfey, Pott, Grassmann, Darmesteter, and others, without possessing the slightest acquaintance with Sanskrit or the Veda, nay with the mere elements of Comparative Philology. I doubt whether

some of them could even have read or understood what they professed to criticise. Kuhn might indeed have proved an excellent critic of Gervinus' History of German Poetry, not Gervinus of Kuhn's Herabkunft des Feuers. Haupt was a great Latin scholar, and I owe much to his lectures at Leipzig, having been a member of his Latin Society. But he was no match for Kuhn on mythological questions, and his famous saying that Comparative Mythologists saw 'un dieu aryen dans tout coq rouge et dans tout bouc mal sentant,' shows the weapons to which he had recourse[1]. Where our critics have gone entirely wrong is by imagining that because some of the identifications of Greek and Sanskrit names of gods offended against certain phonetic rules, or because different scholars differed from each other about the etymologies of the names of gods and heroes, therefore the whole science of Comparative Mythology was wrecked.

Controversies.

When there are two etymologies of mythological names proposed by competent scholars, it is quite right that the one which satisfies all phonetic rules should have the preference. But phonetic rules are not everything in Comparative Mythology, and if our critics had studied more carefully the fates of proper names in all languages, but particularly in Sanskrit, Greek, and Latin, they would not in the case of mythological names have exacted what from

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[1] J. van den Gheyn, Essais de Mythologie Comparée, p. 50. I prefer to leave the words in French. Those who quote this saying, seem hardly to be aware that it was directed, not against Kuhn, but against Mannhardt.

the nature of the case we have no right to exact. Besides, if ever so many mythological etymologies that have been found fault with by competent judges, were surrendered, enough would still remain to save what I consider the really important outcome of Comparative Mythology, namely, the recognition—

(1) That the different branches of the Aryan family of speech possessed before their separation not only common words (μῦθοι), but likewise common myths (μῦθοι);

(2) That what we call the gods of mythology were chiefly the agents supposed to exist behind the great phenomena of nature;

(3) That the names of some of these gods and heroes, common to some or to all the branches of the Aryan family of speech, and therefore much older than the Vedic or Homeric periods, constitute the most ancient and the most important material on which students of mythology have to work, and

(4) That the best solvent of the old riddles of mythology is to be found in an etymological analysis of the names of gods and goddesses, heroes and heroines.

Unless we hold that these names were imposed miraculously, they must have had a reasonable purpose, and whenever we can discover that reasonable purpose, we have come as near the very conception of gods and goddesses as it is possible.

Fermentation of Mythology.

What, however, I consider as the most important outcome of Comparative Mythology is the conviction which it leaves in our minds that the ancestors of the Aryan races were not mere drivelling idiots,

but that there was a continuous development in the growth of the Aryan mind as in the growth of the surface of the earth. That is what will always make the study of mythology dear not only to the historian but to the psychologist also. It was a relief to know that Ammonites and Belemnites were not the work of gnomes and sprites, but that there was sense and purpose in them as in all products of nature. It is to me the same relief to know that the gods of Greece and India were not mere devils or the work of devils or fools, but that they also, even in their greatest degradation, had a rational meaning and a noble purpose.

Personally I consider a comparative study of Aryan mythology as by far the best preparation for a more comprehensive study of the mythology of other nations and languages, whether civilised or uncivilised, and this for the simple reason that we possess in the Hymns of the Rig-veda remnants of a period of mythological fermentation, such as we find nowhere else. What has been so often complained of, the confusion, nay the contradictions of Vedic mythology, seems to me the most useful feature of it, as allowing us an insight into the real genesis of myths. The question whether most of the ancient gods and heroes derived their origin from physical phenomena has been answered once for all by the Veda, and I do not know of a single scholar who, if able to read the Veda, would express any doubts on this subject. On this point also I am glad to have the support of Osthoff, who in 1869 defended the thesis, 'Naturale uniuscujusque mythi argumentum prius, caetera omnia posteriora putanda sunt.' Scholars who maintain that they

can discover this previous fermentation of the mythological thought of India, Greece, Italy, and Germany among the few remaining savage races of the present day, are mistaken. From the very nature of the case, they have, in studying the intellectual development of savages, access to the surface only, all antecedents, all development, being lost to us beyond the hope of recovery. Still even thus they may do some very useful work, if only they will do what Vedic scholars have done, learn the languages still spoken by those so-called children of nature, and if they will always remember what a difference there is between historical continuity and psychological parallelism. For all we know, there may be found customs and myths in the Andaman Isles even at the present day, which underlie actual customs and myths in the British Isles; but the intermediate links of the chain are missing, and, when we deal with savages who have no past, the motives or secret springs of their customs and beliefs are naturally beyond our reach. When we have traced the name of Zeus back to the Sanskrit Dyaus [1], the bright sky, formed from a root which in all its derivatives expresses the idea of brightness, we have reached, as I hold, a stratum below which there is nothing to interest the student of mythology, however interesting these lower strata of human thought and language may be to the psychologist and the

[1] I did not think it necessary to say once more that Dyaus is the nom. sing., and Dyu the stem. However, I may repeat Muir's note (Orig. S. T., v, p. 21): 'The crude form of this word is Dyu. I employ the nominative Dyaus, from its clearer resemblance to the Greek Ζεύς. The genitive is Divas.' More on the subject in my Sanskrit Grammar, ed. by Macdonell.

metaphysician. We have reached what I call a primitive stratum of thought, and as mythologists we require no further antecedents. But if we are told that Unkulunkulu also, the name of the supreme deity of the Zulus, meant the old-old one, or by others that it meant the sky, we are helpless without a knowledge of the Zulu language in its most ancient form, and we must wait till Kafir scholars have cleared up that point, though even then we can hardly hope that the Unkulunkulu of the Zulus will help us to a more profound understanding of the Panhellenic Zeus.

Study of Savage Tribes.

Information is welcome to the Comparative Mythologists from whatever quarter it may come, whether from Hebrew and Babylonian, or Finnish and Estonian, nay also from African and Melanesian sources; for if the light derived from a study of Aryan mythology has lighted up so many dark corners of other mythologies, why should not those mythologies in turn furnish a few instructive analogies to the growth of mythology in India, Persia, Greece, and Germany? I can quite understand the strong prejudice which scholars feel against the purely dilettante work of certain ethnologists who write about the customs and myths of people whose language they do not understand. Still I have always stood up for them, particularly for those who when exploring savage countries were not too proud to learn the spoken dialects of savage tribes. It is all the more strange that I should have been singled out and blamed for ignoring or actually condemning principles which, if I am not quite mistaken, I have

really been the first, or certainly one among the first, to inculcate and to defend, namely that a comparative study of languages, mythologies, and religions should not be confined to those of one family only, the Âryas, but should include all families of speech, all races, the lowest as well as the highest, and all religions whether of civilised or uncivilised countries, all languages, whether written or unwritten. I showed in some of my earliest and now justly forgotten essays [1], what kind of advantage a study of the Aryan languages could derive from a comparison with Semitic and Turanian forms of speech. I tried to show how strong the analogies were between Aryan and other myths, particularly those of American, African, and Polynesian races. My own special work has, no doubt, been chiefly concentrated on Aryan mythology and religion, not however from any contempt for cognate researches, but simply because I did not feel myself strong enough in Semitic, Ural-Altaic, or Polynesian grammar, to venture on independent explorations in those vast spheres of language and thought. I gladly left that domain of our science to men like Castrén, Horatio Hale, Callaway, Hahn, W. Gill, and others who had acquired a knowledge of the languages in which the various myths of savage races had grown up. If I ever expressed any misgivings as to the trustworthiness of the materials on which we were invited to rely, while comparing and analysing the languages, the traditions, and legends of uncivilised races, this was but natural on the part of one who, though not quite ignorant of such classical languages

[1] Letter on the Turanian Languages, 1854.

as Sanskrit, Zend, Greek, and Latin, knew from sad experience how often he had been misled, how often he had been mistaken in trying to interpret the deepest thoughts of Brâhmans, Persians, Greeks, and Romans with reference to the true character of their gods and heroes, and how often he had failed to discover the deepest sources of their moral and religious convictions. Nor did I doubt so much the accuracy of compilers as the competency of the actual observers on whose testimony ethnologists had to rely. The better we become acquainted with the traditions of so-called savage races, after their languages have been studied in a truly scholarlike spirit, the more do we shrink from building any arguments on the accounts of casual travellers or missionaries. But against a comparison of mythologies belonging to races whose languages have been carefully studied, such as Fins or Ests, Lituanians or Lets, I have never uttered a single word. No one would accuse a mineralogist of despising geology because he confined his own special work to minerals, or to the chemistry of minerals. But I was surely the last person who ought to have been accused of hostility by those who advocate a more comprehensive study of humanity, considering that the leading principle of my studies has always been, 'humani nihil a me alienum puto.'

My Defenders.

It is not pleasant to have to defend positions which one never held nor wishes to hold, and I am therefore all the more grateful to others who have pointed out the audacious misrepresentations of my real opinion on Comparative Mythology, and have

reproved the flippant tone of some of my eager critics.

Canizzaro.

To speak of recent works only, Signor Canizzaro, in his Genesi ed Evoluzione del Mito, 1893, has placed the real facts of the case before the public at large. He writes :—

'Ma la conciliazione, feconda di ottimi risultati, e desiderata da molti mitografi non amanti di un eccletismo che passa nella scienza senza infamia e senza lodo ; nè infeudati d'altro canto ad alcuna scuola, e, perció stesso, veri liberi pensatori rispetto a tale problema, ha già trovato fra' filologi un recente fautor, etuttochè parziale—in Max Müller, che, con vera serenità di spirito, rompendo la cerchia metallica dei popoli ariani, ha consigliato ai suoi adepti di spaziare l' occhio per entro alle varie genti in qualsiasi plaga del mondo esse si trovino. Degli avversari il Lang ha ceduto le armi' (p. 21).

Mr. Lang will hardly admit that he has laid down his arms.

As to Dr. Tylor, I have certainly never counted him among my adversaries, but rather among my friends and most useful fellow-labourers. I believe I was the first to explain the importance of Dr. Tylor's works to a larger public[1]. I have always felt most grateful for the work which he has done. It was work that had to be done by some one, but for which I felt that I did not possess the necessary linguistic equipment. Nor can I see that our opinions differ much on any essential points, except perhaps in the degree of confidence which we may

[1] See my article on Manners and Customs, published in the *Times*, 1865.

safely place in the materials supplied by travellers and missionaries[1]. Conscientious writers such as Bastholm, Waitz, Lippert, and others have themselves been the first to acknowledge on what broken reeds they have often had to rest in their study and analysis of the religious folklore of uncivilised races. There is, I cannot help saying so again, but one test of real love of truth in these matters, and of a truly scholarlike spirit, namely, a courageous attempt to master the languages of uncivilised races. Any one who has done that, as Horatio Hale pointed out some years ago, deserves to be listened to. Those who think they can trust to every statement which seems to confirm their own theories, must not complain if those whom they most wish to convince, keep aloof for the present and wait for such books as they have already received from Mr. Horatio Hale, Dr. Hahn, Bishop Callaway, the Rev. W. W. Gill, Dr. Codrington, and a few more. Would anybody with the conscience of a scholar write on Homeric mythology if he knew Homer from the translation of Pope only? Even the best students of American, Bântu, Polynesian, and Hottentot dialects would never think of placing their knowledge on a level with the critical knowledge of Greek possessed by Senior Classics, to say nothing of Hermanns or Cobets. Protests have been entered from time to time against the sweeping assertions and premature conclusions put forward by the students of savage races. But the charm of folklore has hitherto proved too strong.

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[1] What I mean I have tried to explain once for all, see Appendix V to Anthropological Religion, p. 428.

Sir Henry Maine.

The late Sir Henry Maine, a man of sober judgment and no mean authority on the history of early institutions, spoke of 'the very slippery testimony concerning savages which is gathered from travellers' tales.'

'Much,' he says, 'which I have personally heard in India bears out the caution which I gave as to the reserve with which all speculations on the antiquity of human usages should be received. Practices represented as of immemorial antiquity, and universally characteristic of the infancy of mankind, have been described to me as having been for the first time resorted to in our days through the mere pressure of external circumstances or moral temptations [1].'

Professor Le Page Renouf, in his Hibbert Lectures on Egypt (p. 125), speaks still more strongly.

'The habits of savages,' he writes, 'without a history are not in themselves evidence which can in any way be depended upon. To take for granted that what the savages now are, perhaps after millenniums of degradation, all other peoples must have been, and that modes of thought through which they are now passing have been passed through by others, is a most unscientific assumption.'

Mr. Horatio Hale.

Mr. Horatio Hale has not hesitated to guess at some of the reasons why so many writers have lately been attracted by a study of the myths and customs of savage tribes. He is an ethnologist by profes-

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[1] Village Communities, p. 17.

sion; he was President of the American Folklore Society, and he cannot be suspected of prejudice against studies in which he himself stands facile princeps. With all this, this is what he writes in the Transactions of the Royal Society of Canada, vol. ix, sec. ii, 1891, in a paper called 'Language as a test of Mental Capacity, being an attempt to demonstrate the true basis of Anthropology' (p. 80):—

'There can be little question,' he says, 'that one reason why linguistic anthropology, which treats man as an intellectual and moral being, has of late years been superseded by physical anthropology, which treats him as a dumb brute, is that the pursuit of the latter science—if science it can be called—is so infinitely easier. To measure human bodies and human bones—to compare the comparative number of blue eyes and black eyes in any community—to determine whether the section of human hair is circular or oval or oblong—to study and compare the habits of various tribes of men, as we would study and compare the habits of beavers and bees,—these are tasks which are comparatively simple. But the patient toil and protracted mental exertion required to penetrate into the mysteries of a strange language (often without the aid of an interpreter), and to acquire a knowledge profound enough to afford the means of determining the intellectual endowments of the people who speak it, are such as very few men of science have been willing to undergo.'

This is perfectly honest, and yet perfectly fair to both parties, if parties they can be called, except in the sense of being partners in the same important work, and fellow-labourers for the same noble purposes. We linguists have always been most grateful

to missionaries and travellers for anything really valuable which they have contributed towards our studies. We have listened with delight to the stories about sprites and spirits collected from every quarter of the world, particularly if they contained the detritus of ancient mythology, or accounted for customs that now seem irrational. Even when they told us that the myth of Kronos becomes perfectly intelligible, if only we admit that the people who invented it were in the habit of eating their own children without actually digesting them, we have accepted the hint for what it was worth, as a stream accepts its tributaries from whatever source they may spring. The rubbish and sand which they carry will soon sink in the main stream, and something worth having will always remain.

After a time our friends themselves seem to have been afraid that their work was in danger of becoming too popular and fashionable, and the old scholarlike spirit which had directed the researches of Grimm, Kuhn, Schwartz, Mannhardt, and others, has re-asserted itself in such works as Frazer's Golden Bough, a work of which any scholar might well be proud.

What has not been explained, however, by Mr. Horatio Hale, is why these eager collectors of folklore should have manifested at the same time so much resentment against critical students of Oriental and classical literature and mythology.

Sanskrit, and more particularly, Vedic scholarship seems to have incurred their highest displeasure. It was not for me to take up the gauntlet or to defend a position, which so far as I could judge, though it had been threatened, had never been in

serious danger. When we were assured again and again that our work was useless and antiquated, that every one of us was in a minority of one, nay was dead, buried, and forgotten, I felt comforted by the words of Prof. Victor Henry: 'Mais si l'on vous dit que l'école adverse est morte, n'en croyez rien. Si elle n'était pas bien vivante, on ne la tuerait pas tous les jours.' (Revue Critique, 1896, p. 146.) It was different when scholars, whether classical or oriental, criticised either the etymological analysis of mythological names which had been suggested, or found fault with comparisons that had been instituted between the myths of the Veda, of Homer, Virgil, or the Edda. When this was done in a scholarlike spirit as by Curtius, Kuhn, Sonne, Grassmann, or Tiele, and more lately by so learned a veteran as Prof. Gruppe of Berlin, I have always been ready either to defend or to surrender my own opinions. But all these questions are to me serious matters (this is perhaps very foolish), and I could never bring myself to notice mere quips and cranks. Mr. Andrew Lang thought it necessary in his review of the new edition of my 'Chips' to mention that I had never quoted him before. But I have of late written very little about the languages or mythologies of savage races—how then could I have referred to him, whether agreeing with or differing from him? As one grows old, one has to learn the very painful lesson of *contrahere vela*. One has to read the books which one must read, however heavy and tedious; one cannot read all the books one would like to read, such as the charming poems and essays of Mr. Andrew Lang. I confess to my shame that before reading a book,

I generally ask the question whether the author has made a Quellenstudium, whether he possesses his own spade to dig with, on however small a glebe, or whether he simply relies on others. I know I have suffered much from this abstinence, but vita brevis, ethnologia longa.

I have had the advantage of listening to, and working with, such men as Bishop Callaway, Dr. Codrington, the Rev. W. W. Gill, Dr. Hahn, and others, and corresponding with them whenever I wanted information. I have shown my interest in their studies by helping to bring out Dr. Hahn's Tsuni-Goam, the Supreme Being of the Khoi-Khoi (1881), and writing a preface to the Rev. W. W. Gill's Myths and Songs from the South Pacific (1876). This shows that at all events I am not such a despiser of ethnology as some ethnologists would have me. But after all, though students of Comparative Mythology and of Ethnology may have the same object in view, and are working in the same mine, they must resign themselves to working in different levels and with very different tools. If Mr. Lang is digging, let us say, for gold, and I am digging for copper, his shaft need not cross mine, nor mine his. The two run parallel, and may continue to run on peacefully side by side before they meet in the end. Why he should always imagine that the Veda is in his way, I am at a loss to understand. Compared with us, are not Vedic *Ri*shis savages also, or the descendants of savages? If he could explain the whole of Vedic and Greek mythology by the traditions of Kafirs and Hottentots, that would not in the least render our own work superfluous. His work is and can never be more

than psychological, ours is something totally different, it is essentially historical, nay, when possible, linguistic and genealogical. I am delighted whenever I hear in the newspapers of the large output of his shaft, I often wish, for the very reasons mentioned by Mr. Horatio Hale, that I could exchange my mine for his. Still, such as it is, our output also must have some value, for why should our researches rouse so much envy and opposition, nay so much angry language?

Professor Tiele.

I have not seen half of the attacks on Comparative Mythology, but there must have been many, if I may judge from some strong remonstrances coming from quarters whence they would least have been expected. One of Mr. Lang's friends and defenders goes so far as to speak of a journalistic mist that has obscured all scientific criticism, nay he blames me for having tried to refute Mr. A. Lang only, while neglecting 'those great movements of research and thought which have led nearly all serious students of mythology and folklore to discard the most fondly cherished features of my system[1].' Is this quite true?

Besides Signor Canizzaro and Mr. Horatio Hale, the veteran among comparative ethnologists, Professor Tiele, in his Le Mythe de Kronos (1886), has very strongly protested against the downright misrepresentations of what I and my friends have really written.

Professor Tiele had been appealed to as an unim-

[1] Athenaeum, April 4, 1896.

peachable authority. He was even claimed as an ally by the ethnological students of customs and myths, but he strongly declined that honour (l. c., p. 31) :—

'M. Lang m'a fait l'honneur de me citer,' he writes, 'comme un de ses alliés, et j'ai lieu de croire que M. Gaidoz en fait en quelque mesure autant. Ces messieurs n'ont point entièrement tort. Cependant je dois m'élever, au nom de la science mythologique et de l'exactitude dont elle ne peut pas plus se passer que les autres sciences, contre une méthode qui ne fait que glisser sur des problèmes de première importance,' &c.

Speaking of the whole method followed by those who actually claimed to have founded a new school of mythology, he says (p. 21):—

'Je crains toutefois que ce qui s'y trouve de vrai ne soit connu depuis longtemps, et que la nouvelle école ne pèche par exclusionisme tout autant que les aînées qu'elle combat avec tant de conviction.'

This is exactly what I have always said. What is there new in comparing the customs and myths of the Greeks with those of the barbarians? Has not even Plato done this. Did anybody doubt that the Greeks, nay even the Hindus, were uncivilised or savages, before they became civilised or tamed? Was not this common sense view, so strongly insisted on by Fontenelle and Vico in the eighteenth century, carried even to excess by such men as De Brosses (1709–1771)? And have the lessons taught to De Brosses by his witty contemporaries been quite forgotten? Must his followers be told again and again that they ought to begin with a critical examination of the evidence put before them by casual travellers, and that mythology is as little made up of one and the same material as the crust of the earth of granite only?

Kronos and Polynesian Folklore.

After many conversations with the Rev. W. W. Gill, I had ventured to explain one part of the myth of Kronos by a reference to Polynesian and Melanesian folklore, long before the new school triumphantly proclaimed that discovery as peculiarly its own. Prof. Tiele states that Preller already, in his Greek Mythology, instituted the same comparison, and shows at the same time that Mr. Lang's application of it is really faulty (see pp. 17, 27). I do not wish to claim any priority, and as I do not read all the Folklore Journals, the discovery, for all I know, may have been made long before my time. I only mention it here in order to show, as Prof. Tiele has done, that my own method of Comparative Mythology, call it etymological, genealogical, or anything else, does not exclude sound ethnological evidence from whatever quarter it may come. Why should it, if only it is vouched for by a real Polynesian or Melanesian scholar, as, for instance, by the Rev. W. W. Gill or Dr. Codrington? As soon as we know that Ina or Sina, in Mangaia the beloved of Tuna of the cocoanut, means the moon, her legends become transparent. Whether we should gain much by comparing her name with that of the Babylonian moon-goddess Sin, I doubt, but I gladly leave it to ethnologists to decide that question. As soon as it has been proved that Taramahetonga means south-wind, or Taramaakiaki sea-weed, we see a physical background, however distant, for the stories told of them.

Professor Tiele and I differ on several points, but we perfectly understand each other, and when we

have made a mistake, we readily confess it and correct it. But the railleries of M. Gaidoz are quite beyond my obtuse understanding, whereas what Prof. Tiele calls the 'juvenile impetuosity' of these students of customs and myths seems to me deficient even in that French raillerie which is truly called 'un jeu d'esprit de ceux qui n'en ont pas!'

M. Gaidoz.

M. Gaidoz might do such excellent work, particularly as a Celtic scholar, that it seems a pity he should not help us in digging on Aryan ground, where so little has as yet been done for Celtic customs and myths. He is far too much of a scholar to fall under the condemnation of Professor Tiele when he writes (p. 11):—

'Ces braves gens qui, pour peu qu'ils aient lu un ou deux livres de mythologie et d'anthropologie et un ou deux récits de voyages, ne manqueront pas de se mettre à comparer à tort et à travers, et pour tout résultat produiront la confusion.'

This is strong language, but is it too strong?

This confusion is to a great extent the result, I shall not say of ignorance, but of ignoring what has been written by special scholars, and particularly by students of Sanskrit.

It seems that nothing has aroused such opposition and such monotonous raillerie as our constant appeal to language and etymology as solvents of mythology.

The Influence of Language on Mythology.

Whereas I have laboured hard all my life to show the inevitable influence of language on thought, I am told, once for all, that language had nothing

to do with the origin of myths, or, if anything, 'not more than five per cent.' As an admission of indebtedness even five per cent. in these days is welcome.

I had published a large book on the 'Science of Thought,' and a large book may be called a large mistake. I knew few people would read it, but I felt bound all the same to explain, once for all, what I meant by the influence of language on thought, and in what sense I had called, and still call, mythology a disease of language and thought. I imagined I had made it clear that identity of language and thought could only be meant for inseparableness of thought and language. In the strict sense of the word, it is clear that no two things can ever be identical in this world. But I thought I had proved that language and thought are manifestations of one and the same energy. Even Mr. Darwin admitted in the end that signs are indispensable for the formation of abstract ideas, and what signs are more natural and more generally accepted than words? Other biologists went even further, and Virchow admitted 'that only, after their perceptions have become fixed by language, are the senses brought to a conscious possession and a real understanding of them.' If, then, the ordinary signs of abstract ideas are words, and if, as Comparative Philology has proved, every appellative (with the exception of onomatopoeic words) presupposes an abstract idea embodied in a root, it would require but little consideration to understand that in the very first attempts at real language, the sign may react on what is signified. This action and reaction between the sign and what is signified, or, in other

words, between language and thought is, to put it in the simplest form, what is meant by an affection, a pathological affection, or, from another point of view, a disease of language. Anyhow, people who can bravely maintain that language has nothing to do with language and myth, would find it difficult to explain why in Greek μῦθος came to mean both word and myth.

If it is asked how, if language and thought are inseparable, they can react on one another, we must remember that language, which is originally an energy or action, becomes, by pronunciation, an act, i.e. something done, a product, which remains, independent of us, after the action is over. The word, as we hear it and learn it and repeat it, is no longer our creative act, but something apart from us, something past, which, however, like many things that are past, determines in many ways what is present in thought and speech.

How Gender influences Mythology.

Let me give one illustration. If the inherited portion of language did not react on thought, how should we explain so simple a case, not, however, without importance in the formation of mythology, as the reaction produced by the masculine and feminine terminations of nouns on the character signified by a word?

As soon as we call the sun Sûryas, it assumes a masculine, an active character, as brightening, enlivening, fertilising the world; call it Sûryâ, fem., or *Svârâ = Hêre, and we have before us a kind and beautiful woman, a bride, a wife, a mother, as the case may be.

The Moon.

It is well known that in the Teutonic languages the moon was originally masculine, as the ruler of times and seasons, and as the guardian of all the institutions dependent on times and seasons, and this at a period in the history of civilisation long before the course of the sun had been sufficiently watched to serve the same purpose.

We have Gothic mêna, m., O. H. G. mâno, m., A. S. mônа, m., Icel. máni, m., Greek μήν, m., Sk. mâs, m. The names for month are the same, or slightly modified, but always masculine.

The Sun.

The sun, on the contrary, is Goth. sunnô, fem., A. S. sunne, fem., and this can only have been due to the introduction of solar by the side of lunar chronometry. In Gothic we find not only sunnô, fem., but likewise sunna, masc. The Old Norse sól, however, is fem. only, and therefore not borrowed from Latin sol. As soon as mythology says anything about sun and moon, it is clear how it must submit to the fetters of language. If the Edda speaks of sun and moon as the children of Mundilfäri, the giant who is supposed to make the heavens turn round, Máni, the moon, becomes at once his son, Sól, the sun, his daughter.

In the Slavonic dialects the sun is chiefly named and conceived as feminine, and if that is once done, the whole family of the sky had to be rearranged accordingly. Hence, in an early stage, the sun with the Slaves [1] was a cow, the moon a calf, the stars goats. At a later time the sun is a beautiful maid,

[1] Krek, l. c., p. 300.

like the dawn, playing on the meadow of the sky. Her children are the stars, and one of them, Ivan, calls the moon his father, the sun his mother, the gloaming his sister, and the grey falcon (morning-star?) his brother. In other songs, however, all this is changed. The sun becomes the father, the moon his son; nay, sun, moon, and rain are represented as three brothers. In one song the sun is the mother of the dawn, in another her daughter, and in a third the brother of the moon[1], just as Hêlios is the brother of Selêne.

Who can fail to see the germs of mythology in all this? And yet we are told ex cathedra that language has nothing to do with myths which tell us of the fates of the supreme deities, such as sun, moon, sky, rain. If there had been no distinction of gender should we have had one set of stories of the sun as a woman, another of the sun as a man? And why are sexless languages, as Bleek has shown, so poor in mythology, if these small differences between Sk. as and â, Gr. ος and α, Lat. us and a, had had nothing to do with thought, nothing with mythology? Should we have had in the Veda the myth of Savit*ri* giving his daughter Sûryâ (sun) to Soma (moon), and among the Slaves the myth contained in the following verses?—

The Moon leads home the Sun,
It was in the first spring.
The Sun rose early,
The Moon left her,
He took a walk alone,
Fell in love with the Morning-star,
Then Perkana was angry,

[1] Krek, l. c., p. 315.

And cleft him with his sword.
'Why hast thou gone away?
Walking alone by night?
Flirting with the Morning-star?'
Then his heart was sorrowful.

Here we have the full-grown myth, and could this myth have grown up unless the moon had been a masculine? It should be remembered that in Indian mythology also, Soma, after being married to the twenty-seven daughters of Daksha, is faithless to them, and lives with Rohinî alone, so that his father-in-law causes him to become consumptive. At the intercession of his wives, however, this consumption, it is said, ceased to be fatal, and was made periodical—a myth easy to understand.

Ideas fixed by Words.

But gender is by no means the most important manifestation of the influence exercised by language on thought. Why is there a name for light, say Dyaus; why is there a name for darkness, say Night? These names were not given to men as a present. They had to be created and elaborated, and they then remained as facts and powers to be reckoned with. There need have been no name restricted to the transient light of the dawn, but when that peculiar light had once been singled out and named, it could not be ignored again.

We have been told that there are languages without numerals above two or three, without words for right and left, east and west. There are certainly languages without words for heroes, half-gods, goddesses, and all the rest, thus showing that all such ideas had to be elaborated, and that if there were no words, there were no ideas.

Sometimes, however, nay very frequently, it happened that two names derived from two salient attributes were given to the same object, say the fleeting light of the morning, and in that case there would be two powers that would have to be accommodated in the folklore of ancient nations. And if, on the other hand, the same name had been given to two objects, such as the twilight in the morning and the twilight in the evening (náktoshấsâ sámanasâ vírûpe), conflicts and confusion would inevitably arise, which it required all the ingenuity of poets and story-tellers to set right.

Here is the real, far-reaching influence of language on thought, and here we can learn in what sense the two may be said to be identical, or at least inseparable. And yet people ask, What is the meaning of a disease of language[1]?

Deva.

Who can say whether it was the work of the thought or the language, of man thinking or of man speaking (as if the two could ever be separated), that deva, meaning bright, should have been used with reference to the sun, moon, stars, sky, dawn, morning, spring, &c., so that by becoming generalised, it gradually lost its definite physical meaning, and signified in the end no more than a quality shared in common by all these powers, so that it came to mean god or whatever was intended by deva, deus, god? Should we ever have had such a name for god, imperfect as it was in the beginning, except for the almost mechanical working of language, uncontrolled by any wish or will of the speaker?

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[1] O. Gruppe, Jahresb. über d. Mythologie, 1891–92, p. 20 seq.

Importance of Mythology and Philosophy.

And then we are asked, What has language to do with thought? Might we not ask in return, What has thought to do with language? It is as a necessary phase in the historical development of human thought that mythology becomes of real importance to every student of philosophy. Ever since Schelling, towards the end of his life, delivered his lectures on the Philosophy of Mythology, mythology has ceased to be a mere amusement. It is to philosophy what the Devonian stratum is to geology, the period of the moneres and the amoeba to biology. If there is continuity in the growth of the human mind, and if mythology by its irrational appearance has long seemed to break that continuity, the Science of Mythology undertakes to remove what seems irrational and to vindicate the postulated continuity of human reason. 'Hic Rhodos, hic salta!'

Differences of Opinion Natural.

In such a science as Comparative Mythology, which undertakes to rediscover the thoughts hidden in linguistic petrifactions four or five thousand years old, we cannot yet expect perfect certainty or unanimity, we must be prepared for uncertainties, such as are inherent in the subject itself; nor must we object to criticisms, if only serious, and not made purely for the sake of controversy. If we also have caught now and then a Protogenes Haekelii, we can confess our mistake, we can even account for it.

We may all agree that the so-called deities and heroes of ancient mythology represented originally unknown agents behind certain phenomena of nature

—at least I am not aware of any one who would contest this now—but there has often been difference of opinion as to what special phenomenon is represented by a certain god or goddess.

Importance of Names.

Here the names of gods are of immense usefulness. That Agni was originally meant for fire, even when he is represented as the courteous lover of Mahishmatî, the daughter of King Nîla (Physical Religion, p. 198), no one would be bold enough to deny. Here the evidence of the name is too strong, nor would the phonetic difficulty, serious as it is in these words (Latin i = Sanskrit a), justify us in denying the identity of the Sanskrit Agni and the Latin ignis. But when the name speaks less distinctly, there may be, of course, differences of opinion as to what element or what event in nature formed the real starting-point of a myth or a legend. And yet the choice is never very large. First of all, some mythological names have retained their appellative character. No Sanskrit scholar could doubt for one moment that Savit*ri*, Sûrya, Mitra, Vish*n*u, Virâ*g*, Rohita, nay even Pra*g*âpati, are all meant for the light or the sun, each, no doubt, having his own peculiar character, but all starting from a common source. In several of their later developments these deities coincide with others, such as Agni, fire or light in general, with Yama (the setting sun), nay even with Dyaus (the bright sky), and Indra (the giver of rain). If one were to say that therefore Indra and Dyaus are both the sun, the same as Savit*ri* and Sûrya, this would give a totally false impression, though no one can doubt that some of

the achievements ascribed to Dyaus or Indra are the achievements of solar or celestial agents. It would be equally wrong to take Apollon, the son of Zeus, for the sun, though no one can doubt that many of the actions ascribed to him can only be understood as solar actions. If par*g*anya in later Sanskrit means a rain-cloud, how can we doubt that the character of the Vedic deity Par*g*anya was the same, though when Par*g*anya is represented as an active and a fighting hero, his character often approaches very close to that of Indra, followed by his companions the Maruts.

Help to be derived from Gender.

Secondly, within the sphere of Aryan mythology, gender helps us to distinguish between what are called gods and goddesses, and we know on the whole which phenomena of nature may be looked upon as active and masculine, and which as passive and feminine. Still even here there are difficulties. The dawn, no doubt, is generally a feminine deity, but in the form of Pater matutinus or Janus, or of Agni ushasya, we have male representatives of the matutinal light.

The earth, P*ri*thivî, is mostly conceived as a mother, but the deities beneath the earth, the Chthonioi, or Katachthonioi, such as Zeus-Hades, or Pluton, and Hermes, in some of their capacities, are masculine, by the side of such goddesses as Dêmêter and Persephone. The night is generally a feminine, but there are some of her features which have been personified by masculine names, such as Kerberos, the Sanskrit *s*arvara. The most perplexing physical phenomenon with regard to its gender

is the moon. Among the Aryan nations the earliest conception of the moon was certainly masculine. We saw that he was thought of as an active power, as determining the nights and days, as helping man to count days, weeks, fortnights, and moons, nay even as the giver of rain, and as the lengthener of life. In that case the sun by the side of the moon would often, though not always, be a feminine. But with the prevalence of solar chronometry, the sun, as the more powerful luminary, began, after a time, to replace the moon, so much so that the moon had often to become a feminine, in order to be conceived as the companion of the sun, whether as friend, or sister, or wife. In that case the mythological character of the moon changed so completely that many things which were formerly said and sung of the night or of the dawn, as the friend of the sun, were supposed to refer to the moon. People in whose language the moon had become a feminine became themselves doubtful whether certain legends of love-sick maidens were originally meant for the dawn or for the moon[1]. What they were unable to do, we are not likely to achieve, unless we avail ourselves of an instrument which they did not possess, I mean the microscope of etymological analysis. With the help of this we can see how in some cases the masculine names of the sun were changed into feminines, how Sûryă became Sûryâ, Savit*ri*, Savitrî, so as to fit into stories in which the moon acted a masculine part. Nor need these changes have always been successive in time. If one clan spoke

[1] This will serve to account for the difference in the interpretation of certain myths between myself and Professor Siecke, in his book, Die Liebesgeschichte des Himmels, 1892.

of the moon as a masculine, a neighbouring clan might have looked upon the sun as a feminine, and vice versâ. The old Sanskrit name of the sun, Savit*ri*, was masculine, but it appears as a feminine in Savitrî, in whose dying husband, Satyavat, we cannot but recognise the waning moon.

The Dual or Correlative Character of Deities.

Thirdly, we can easily distinguish a whole class of correlative [1] deities corresponding to such prominent dual phenomena in nature as day and night, sun and moon, spring and winter, heaven and earth, and in their case also recognition becomes easier. Only here, again, we must never forget that the sphere of action of each deity is very wide.

The Asvins and Helena.

The two Asvins, for instance (not the horsemen, but the descendants of Asvâ, the dawn), were, no doubt, originally representatives of light and darkness in their constant changes, seen in the unbroken succession of day and night and their concomitant phenomena. Their sphere of activity might be widened or narrowed. While in some passages they seem to represent the alternation of light and darkness in the most general way, they occupy elsewhere the well-known spheres of Mitra and Varu*n*a, of Agni and Soma, and seem to have been taken or mistaken occasionally for the representatives of the morning and evening stars. In India they were, at a later time, taken for two kings famous in ancient story, thus explaining the legendary character of their counterparts in Greece, such as Kastor and Poly-

[1] See Science of Language, ii, pp. 604 seq.

deukes, and similar pairs of brothers or twins. If then these dual deities are what they are, say morning and evening, what can their sister (their ἀδελφή, sagarbhâ) have been meant for? If Helena was the sister of the diurnal twins, the Διός-κοροι on their white horses, who could she be but the dawn, the daughter of Zeus, duhitâ Divas?

Whatever difficulties may be urged against this explanation, they must all give way before these simple facts, so that whoever tries to defend the historical character of Helena, must also establish the historical character of the egg from which she was born together with her two brothers, the sons of Lêda and the swan (Tzetzes Lycophr. 511).

Many-sidedness of Ancient Gods.

In this way the choice of possible prototypes of ancient mythological personalities is limited, but though there is no great danger of our mistaking gods of the day for gods of the night, or gods of the waters for gods of the hills, still we must always remember that the sphere of activity of the ancient gods was not so strictly circumscribed as we imagine. If we keep this fact in view, we shall see that many of our difficulties in explaining the character of the ancient Vedic gods were self-created, and that Yâska was right in assigning to each Deva a far wider sphere of action, by no means restricted to the small domain from which, as its name shows, a god took his first departure. The god of the bright sky has many sides. Some of the legends told of him may reflect the rising sun or the morning, others the clouds, the storm, the rain, even thunder and lightning, others the bright spring or the year, others

even the setting of a glorious life conveying the first intimation of a life to come. How the character of a god can change through the preponderance of one or the other of his attributes, we see in the case of Varu*n*a, originally no more than the god of the dark covering sky, who, in the later Hindu mythology, became the god of the waters; or in the case of the A*s*vins who, being originally representatives of day and night, as appearing alternatively before the eyes of men, became in time two kings nay the two physicians of the gods.

Even Indra was often worshipped as the supreme ruler of the gods, with an utter forgetfulness of his more limited physical character as fighting the dark clouds and delivering the waters held captive within them. But with all these reservations, our attempts to discover the original meaning of the names of gods and heroes has still many difficulties to contend with.

Etymology uncertain.

There are prejudices, particularly among classical scholars, so strong that the etymology of Zeus, and the relationship claimed by the Vedic Dyaus with the Greek Zeus, is ignored, if not openly rejected. While Signor Canizzaro says: 'Dyaus = Ζεῦς πατήρ = Jupiter, Varu*n*a = Οὐρανός, Ἑρμῆς = Sârameyas, Ἐρινύς = Sara*n*yû sono verità dimonstrate irrefutabili;' other scholars declare these equations are futile or impossible. Fortunately there are tests to which both parties must submit, and from which there is no appeal. It has never been denied that there are cases where no amount of scholarship will enable us to decide between two etymologies.

Whether Vesta or Ἑστία is derived from the root vas, to shine, or from the root vas, to dwell, is impossible to decide on phonetic grounds only, however positively some scholars may declare in favour of one or the other view [1]. The same applies to the name of Hêre, whether equivalent to a postulated svârâ or vasrâ. Here we must be guided by other evidence, and the same applies to numerous cases where, in comparing mythological names in different Aryan languages, we are met by certain real or imaginary irregularities, whether in their vowels or consonants. On this more hereafter.

Mythological and Historical Elements.

Mythology is a compound of many and very heterogeneous elements. But whatever additions may have been made to it afterwards, it must always be remembered that the foundation of mythology was physical. On this point there can be no longer any difference of opinion. Without a recognition of that substratum, a study of mythology would cease to be a scientific study. The beginning of mythology came from a poetical and philosophical conception of nature and its most prominent phenomena; or, if poetry and philosophy combined may claim the name of religion, from a religious conception of the universe. Its later development, however, seems to exclude nothing that can touch the hearts of men. Hence arises the great difficulty, nay the impossibility of applying the same key to all the secret drawers of mythology.

[1] Fick, s. v., derives ϝεστία, ϝιστία, and Vesta from vés, to dwell; ushâs, αϝώς, dawn, from ves, to shine.

Though in geology we can understand the regularly stratified layers, it does not follow that we can always account for erratic fragments in them, or for the change and confusion produced by volcanic irruptions and consequent metamorphic changes. The same in mythology. As long as mythology reflects nature, and describes nature in terms of poetry, of animism, or personification, we can generally follow its footsteps; but as soon as it admits into its strata historical personages and historical events, our chisel breaks. Hence the reproach that has been addressed to Comparative Mythologists, that they can carry us to a certain point only, but that then they leave us in the lurch, is true, but it is no reproach at all.—We wish to explain what we can, but we cannot explain all we wish.

Hêrakles, Alexander, Charlemagne.

Take such a case as that of Hêrakles. His distant solar origin will hardly be doubted. But as soon as some of his solar labours had become popular in Greece, as soon as Hêrakles had become a Greek hero, there arose a demand for more and more Hêrakles-stories, whether they were solar in their origin or not. Hêrakles was no longer a solar hero only, but he became what has been called a Culture-hero, that is, an ethical character who brought light out of night, who punished the deeds of darkness, rescued the victims of violence, and was looked upon as the protector of law and order, nay as the founder of cities, and the ancestor of royal families and of whole clans. When such a character had once been created, there sprang up ever so many local claimants, and what is told of them need no

longer be mythological at all, but may often have been historical or legendary or purely imaginative.

And yet it may happen that even these new and fanciful stories retain some mythological reminiscences, and thus provoke explanations which in one sense may be quite right, but may also be quite wrong, just as if we should mistake pieces of rock in artificial concrete for natural rock.

People who are incredulous on this point should read the mediaeval stories of Alexander and Charlemagne to see what havoc mythology may play with history, or the epic poetry of the Shâhnâmeh to see how ancient physical mythology can be disguised as bona fide history. Professor Bloomfield, in the Journal of the American Oriental Society, xvi, p. 24, 1893, has sounded a note of warning on this point which should not be neglected by students of mythology.

'It seems quite likely,' he writes, 'that this describes the striking of the lightning into the ground, but possibly this last feature of the myth is not a part of the purely naturalistic phase of the legend, which may at that point have passed into the hands of the poet, who, in India as elsewhere, would draw upon the stores of his imagination for the extension and embellishment of myths of a primarily naturalistic character, combining, in accordance with the dictates of his fancy, any features from other legendary sources which seemed to him suitable to the taste of his hearers[1].'

Mythology Anomalous.

It has been said that the whole character of mythology is anomalous, and there is a much deeper

[1] See also J. A. O. S. xv, p. 185 seq.

truth in this than it was meant to convey. The very words in which a myth is embodied are full of anomalies. Mythology contains many ideas which we can no longer understand, and places before us facts which are certainly not in keeping with what we know of ancient times and ancient people, even the most savage and uncivilised. If we can discover reason in some parts of mythology, we ought to be satisfied; as to our ever understanding the whole of it, that is out of the question. Astronomers have brought Neptune to reason, but there are nebulae of stars which have as yet defied the power of any telescope. It is the same in mythology. We have reduced a number of anomalies and irrationalities on the dark firmament of mythology to order, and we have acquired the conviction that reason ruled even there. But beyond that we cannot go, at least not at present, whatever discoveries may be in store for future Herschels, Leverriers, and Adams's.

Stages of Mythology.

It was Kuhn[1] who first pointed out that we could distinguish the successive stages of civilised life in their effect on the mythologies of different nations, or of the same nation at different times. There was no doubt a hunter mythology, a shepherd, and agricultural, even a maritime mythology, but I think that Kuhn has attempted to define these periods far too sharply. They cannot be fixed chronologically, nor do they always follow each other in regular succession. As I had tried to show before him, we have to deal in mythology with phases of development which in different countries may last

[1] Die Entwicklungsstufen der Mythenbildung, 1874.

for a longer or shorter time. They are not periods in the strict sense of the word, they are more like Comte's three periods of civilisation, the offensive, the defensive, and the peaceful. It has even been suggested, though not by Kuhn, that some of the chapters of Greek mythology reflect a time when the ancestors of the Greeks were on a still lower stage than the offensive, when they were in fact cannibals. I do not deny the possibility, I only wait for proofs.

Anomalous Names.

These anomalies of mythology show themselves not only in the substance, but likewise in the form of mythology, I mean in the names with which we have to deal, whether names of persons or names of places, of rivers or of mountains. At first a name was always meant to be understood, otherwise it would not have been a name, but it ceased to be so when phonetic corruption set in, or when the roots to which a name owed its existence, fell out of use. This inevitable result, which can be seen more or less clearly in many parts of the Aryan dictionary, is most perceptible in its mythological portion. We know by sad experience that nearly all the ancient mythological names are so changed that they conveyed hardly any meaning even to those who used them, while our ordinary etymological solvents are often totally ineffectual when applied to them. What does this prove? Does it prove that these names had no rational origin at all, no prakriyâ, as Sanskrit grammarians would say? Is such a thing thinkable? Or does it not clearly show that these names belong to a more ancient stratum, that

they cannot be explained as products of the surface soil of Aryan speech, nor of the linguistic stratum immediately underlying it, nay, that their very roots lie so deep that they evade all the ordinary methods of search, and that in consequence, the phonetic and morphological influences under which they grew up cannot be expected to have been exactly the same as those which pervade later periods of the history of Aryan speech. We must learn to face facts such as they are, and not imagine that by simply shutting our eyes they will vanish. Names such as Agni, fire, in the Veda, or Vâyu, wind, or Sûrya, the sun, or Pra*g*âpati, lord of creatures, or Vi*s*vakarman, maker of all things, are easy enough, but for that very reason it would seem that, far more than less transparent names, they had resisted mythological infection and disintegration. The same applies in Greek to such deities as Hêlios, the sun, Selêne, the moon, Nyx, the night; or in Latin to Sol, Luna, or Terra. They are all simply appellative, they belong to historic or but slightly prehistoric Sanskrit, Greek, and Latin, and they have therefore escaped more easily the metamorphoses and the misunderstandings of mythology. Of course, the older a name, the more liable it is to phonetic corruption, and in consequence to mythological interpretation and misinterpretation. Even with us, and during the Middle Ages, a saint had generally to wait for his halo till contemporary witnesses had ceased to exist. There are no doubt exceptions to this observation, but as a rule we may say that the more ancient and the more obscure the names of mythological persons, the thicker the cluster of myths that has grown up around them.

Vedic Names.

Take such names in Sanskrit as Aditi, Aryaman, Indra, Ilâ, Urvasî, *Ri*bhu, Kuhû, Tanûnapât, Dadhikrâ, Narâsa*m*sa, Nir*r*iti, Pa*n*i, Par*g*anya, Pûshan, P*ri*sni, B*ri*haspati, Bhaga, Mâtari*s*van, Mitra, Mitrâ-Varu*n*au, Yama, Yamî, Râkâ, Rudra, Rodasyau, Vanaspati, Varu*n*a, Vish*n*u, V*ri*shâkapi, *S*ukra, *S*una, *S*unâsîrau, Sara*n*yû, Saramâ, Sarasvatî, Sinîvâlî, Soma, and many more, and you will find that hardly one of them is what I call etymologically transparent, tells, as it were, its own tale, or could have been understood by people who spoke the ordinary Sanskrit. Can we say that this is mere accident ?

Folk-etymologies.

Several of these names had so completely lost their true meaning, that artificial and altogether erroneous etymologies had to be assigned to them, so that they might convey once more some kind of meaning to their worshippers. Thus Indra, instead of being understood as the giver of rain (ind-u), was derived from a root meaning to rule, to be supreme, this corresponding to his later character as the first among the ancient gods. This shows how ineradicable the feeling was even among ancient people that every word must have some etymological meaning. Every language is full of such etymologies, commonly called folk-etymologies, and they apply not only to proper names, but to ordinary words also. Thus deva, god, which was really derived from a root which means to be bright, was by ancient scholastic interpreters derived from another root dâ, to give, so as to mean giver of gifts ; just as in Greek θεός

was derived by Herodotus (II, 52) from a root θη meaning to settle, because the gods had made and settled all things, and by Plato (Kratyl. 397) from a root meaning to run, because the first gods, sun and moon, were always seen moving and running.

Words without any Etymology.

If we ask how it came to pass that a word or a name should be without any etymology in the language in which it was fashioned, we must remember that every living language is built up on a succession of lower strata of speech, of speech which is no longer living, that is, is no longer understood, just as a geological stratum which was once full of organic life, forms the dead support of the next stratum. The lower stratum may, however, here and there pierce through the superincumbent soil, and may with its decayed elements interpenetrate the new life of a higher stratum. If that lower stratum were completely lost, we should often feel at a loss to account for such sporadic petrifactions as have found their way into the higher stratum, but are not related to its proper fauna or flora. In the same way the names of Vedic gods which cannot be accounted for, if we are restricted to the sources of the Vedic language, such as we know it, may date from an earlier period, lost to us, except in a few survivals. This is clearly the case in modern languages. It would be impossible, with the resources of the French language, such as we know it, to account, say, for such a compound as Jeudi, Thursday, dies Jovis. The living French language has no such word as Jeu (except jeu from jocus), nor any materials out of which it might have formed such

a compound as Jeu-di. The phonetic rules and the syntactic character of such a compound are not only different from, they are opposed to the genius of the present language of France. If then we were to say that to derive Jeudi from Jovis dies was unscholarlike, we should be arguing in exactly the same manner as when, in the etymological analysis of ancient mythological names, whether in Vedic Sanskrit or in Greek and Latin, we insist on the strict observance of phonetic rules applicable to ordinary Greek or Sanskrit words.

Study of Mythology changed.

If we consider all these difficulties inherent in a truly scientific study of mythology, we may well understand why classical and oriental scholars, to whose domain mythology has hitherto belonged, should hesitate before they attempt to annex new kingdoms. The irregularities of written languages, such as Greek and Sanskrit, are quite enough for them, without incurring new dangers in trying to grapple with the anomalous nouns and verbs of Zulu or Suaheli. Let others who have greater talents and greater courage undertake this work. There is room and plenty of work for all of us, and the more thoroughly the work is done, the more will it benefit the important study of mythology. Even work at second hand may sometimes prove helpful, but original work is better; at all events, if scholars feel a preference for the latter, they surely do not deserve any blame.

It is quite true, no doubt, that mythology, by assuming these severely scientific airs, has lost much of its former charms. Even fairy stories have

not quite redeemed its character or restored to it its former popularity. But it has gained a new and lasting interest by enabling us to recognise in it an integral link in the chain that binds all generations of men together, a phase in the growth of the human mind that has to be understood, a period of history full of philosophical and even religious lessons, a subject worthy of the honest labour of the scholar and the serious reflection of the philosopher.

CHAPTER II.

ON THE PROBLEMS AND METHODS OF THE SCIENCE OF MYTHOLOGY.

The Three Schools of Mythological Study.

THERE was a time, some people may think that it is not quite passed yet, when Greek and Roman mythology were studied chiefly in order to enable educated people to recognise the originals of the statues bequeathed to us by the great sculptors of antiquity, and to understand the allusions to gods, goddesses, heroes, and heroines, which meet us on every page of the ancient classics and of many of their modern imitators. The stories told of the ancient gods and goddesses were considered as either beautiful or disgusting, but they were accepted, such as they were, and we know how some of our greatest modern poets have derived their inspirations from them and continue to do so to the present day. Of course, the gods and goddesses were called false gods and false goddesses, as if there could ever have been true gods or true goddesses. But even if they were considered as unworthy of a divine station, they were accepted as something like the poetical creations of mediaeval romance, King Arthur, Alexander, and Charlemagne, or like Dr. Faust, Don Quixote, and Werther in more modern literature. The ancient gods and goddesses of Greece and Italy seemed, in fact, to possess a peculiar kind

of life, something between reality and unreality; though in some cases they were actually recognised, as, for instance, by St. Augustine, as evil spirits[1], not altogether to be deprived of their right to exist, however unworthy they might be of the name of god or goddess.

There were other students of mythology who looked upon the ancient gods and goddesses as we have a right to look, if not on King Arthur, Alexander, and Charlemagne, at least on Faust, Don Quixote, or Werther, namely, as poetical creations, but not without a few grains of reality in their constitution, as the result, in fact, of that mixture of Dichtung und Wahrheit with which even historians must often be satisfied in ancient, nay sometimes in modern times also.

There may have been a Don Quixote, whom Cervantes had in his mind in writing his story; there was an Arturus, the brave leader of the Silures, a Dr. Faustus at Erfurt and Wittenberg, and a Werther at Wetzlar, round whom tradition and poetry have formed a cloud often difficult to pierce.

Myth and History.

If we speak of historical elements in mythology, historical is hardly the right word, for history, in our sense of the word, did not and could not exist at the time when the names and fates of real persons were first drawn into the stream of myth and legend. We have only to reflect for a moment to see that history, in the sense of an authentic or written record of the acts of real persons, whether kings or heroes, statesmen or poets, was impossible

[1] See also Milton's Ode on the Nativity.

at the time when mythology began to grow and spread. While, if we take history in the sense of actual events, it is easy to see that such events, whether migrations or conquests, battles or murders, intrigues or betrayals, could not be known, whether near or afar, except in the form of rumour and gossip, as Sage in fact, which is not very far removed from myth. With all our newspapers, telegrams, war-correspondents, parliamentary reports, and all the rest, what is there known to the people at large to enable a poet of the people to sing, for instance, the story of the siege of Lucknow? And is it not a fact that the most poetical event of that memorable siege, the story of Jessie Brown hearing the bagpipes in the far distance playing 'the Campbells are coming,' has been proved to be without any foundation whatever, though at the time it was considered as in the highest degree unpatriotic to express any doubt about it? What then could the poet of the Nibelungen, whether the Kürenberger or any other poet of the twelfth century, what could the poets of the Edda-songs, nay, what could the contemporaries of Alarich and Aëtius know of the secret intrigues at the courts of Valentinian and Galla Placidia, to enable them to distinguish the events of that time from the mythological traditions referring to Siegfried (Sigurd) and Hagen?

Those who are ready to discover historical elements in mythology and epic poetry ought never to forget that in this marriage between myth and fact, myth comes first. It is not till a solar hero, call him Hêrakles, or Sigurd, or any other name, has been created that any other real hero can be called Hêrakles, or a Hêrakles, and his achievements be

sung as the achievements of Hêrakles. In the same way, if, in the Nibelungenlied, the second husband of Chriemhild is called Etzel and identified with Attila, king of the Huns, there was an Atli also in Norse mythology long before the invasion of the Huns. There was likewise a Hruodlandus, 'Britannici limitis praefectus,' there may have been a duke of the Silures, called Arturus, but most of the deeds ascribed to them in mediaeval poetry are deeds performed long before their time by mythological heroes whose very names were afterwards forgotten. Nearly all the heroes of the Shâhnâmeh, an epic poem which in the eyes of Persians represents the earliest history of their country, are known to be corruptions of names of legendary beings in the Avesta, some of whom can be traced back as far as the hymns of the Veda. Let us admit then that, as Schliemann maintained, there was at Hissarlik a fortified place besieged and conquered by the Greeks, does any one believe that the historical hero, who near the walls of that fortress performed the funeral games in honour of his friend Patroklos, was the mythological hero who was called the son of Thetis, and who was vulnerable, like Siegfried and other solar heroes, in one place only? The exact process by which myth and story are amalgamated is, no doubt, extremely obscure, dependent as it is on the memory, or rather the forgetfulness, of the people, and in the end on the creative faculty of the poets. Still, we may be certain that the mythological mould must be there first, before the historical metal, in a more or less molten state, can be poured into it.

When we examine the earliest mythological or

epic poetry, we are deprived of all means of identifying historical elements that may occur in it. We can only trust to a certain tact, acquired in the study of mythology, to help us to distinguish between hard facts and more or less pliant myths. We are more favourably placed when we have to deal with epic poems which received their final form at a time when the events of contemporary history are known to us. The date of the Nibelungenlied, as we now possess it in Middle High-German, has been fixed at about 1200 A.D., that of the Older Edda at about 1000 A.D. All scholars, however, seem agreed that similar songs existed long before that time.

Heroes.

We must not forget that unless a hero is a human being raised above the level of humanity, he can only be a god brought down to the level of humanity, or a mixture of both. Tertium non datur. Neither spirits, nor totems, nor fetishes, will supply the germs of the race of heroes. The name, however, when it had once been coined, and no one knows how it was coined[1], remained, just as the name gods remained, even when their true hypostasis had long vanished.

The concept of a god in the singular is the most impossible and contradictory concept that was ever shaped in the human brain. It can hardly be called a concept at all, though it is a name. It is only from an historical point of view that the evolution of this word becomes intelligible and full of interest. The concept of the One God, however, would seem to

[1] Prellwitz derives ἥρως boldly from Sanskrit sâra, sap, power.

have been unattainable except by starting from the concept of many gods or agents of nature. The henotheistic and polytheistic stages were both necessary as preparations for the monotheistic stage, but when that stage had been reached, when the concept of a God above all gods, and lastly of God had once been realised, the gods in the plural ought, ipso facto, to have vanished. The greatest confusion was raised and the greatest mischief done when ancient and even modern thinkers imagined that gods were really the plural of God, and that what was applicable to the gods was applicable to God also. It was perhaps inevitable that the name of the chief of the old gods, whether Zeus or Jehovah, should have been retained as a name of that necessarily nameless Being which we mean by God. The sages of Greece knew perfectly well that what had been told of Zeus was not applicable to God, and yet they retained the name, only stripping it as much as possible of all that seemed incongruous in its new employment. The Jewish prophets also, who aspired after the true God, and were no longer satisfied simply with a God above all gods, nevertheless clung to the name of Jehovah, only removing from it as much as possible all that was unworthy of the deity. Nay, even Christian poets, such as Dante, have not hesitated to use Giove in the same sense, and we know to what perilous heresies the early Church was exposed by speaking of Christ as a god, or the son of a god.

The True Problem of Mythology.

What we now want to learn from the study of mythology is something very different. We want

to know how these so-called gods came to exist at all, and what was the meaning of all the facts and circumstances related of them? After they had been superseded by the true God, was there no substance at all left, no real personality behind all their personal adventures? This question has often been asked, and it is a question which has assumed very great importance in our own time, when the feeling of the solidarity of the human race has grown so much stronger than it was formerly.

Our True Interest in Mythology.

The ancient Greeks are no longer mere curiosities in our eyes, nay even the ancient inhabitants of India are not altogether outside the sphere of our sympathy. They form an integral part of that humanity to which we ourselves belong. What happened to them, has, in one sense, happened to us; what they thought must be thinkable to us; what they believed cannot be altogether different from what we believe. We may have advanced, just as our God has advanced beyond Jehovah, and as Jehovah had advanced beyond the Elohim of the Gentiles, but there must be continuity in all the strata of thought as there is in the strata of the earth. Otherwise humanity would cease to be an object of scientific interest, each individual would be an ephemeral moth, language a mere sound, thought a mere dream.

We may well understand therefore why the question of mythology should have occupied modern philosophers even more seriously than ancient thinkers. We want to know of what stuff the

gods were made who were believed in by the ancient Aryan speakers, and what is the meaning of the credible and incredible stories told about them. The two questions are really inseparable, and their answer, involving the descent of the human mind, seems to me to concern us more even than that of the descent of man, as a mere animal. Suppose that men could be proved to be the lineal descendants of some unknown Simian species, that would after all concern our outside only[1]. Even if we had to think of our ancestors as adorned with tails, this need not deprive them of our sympathy. But if it could be proved that we were descended from idiots and maniacs—and many of the stories of the ancient gods are the stories of maniacs—we might justly feel nervous as to atavistic influences.

Disease of Language.

The question of mythology has become in fact a question of psychology, and, as our psyche becomes objective to us chiefly through language, a question of the Science of Language. This will explain why, when trying to explain the inmost nature of mythology, I called it a Disease of Language rather than of Thought. The expression was startling, and it was meant to be startling, in order to rouse attention, and possibly opposition. I think it has done both, and so far it has done good. But after I had fully explained in my Science of Thought that language and thought are inseparable, and that a disease of language is therefore the same

[1] See Sir Walter L. Buller, Illustrations of Darwin (1895), p. 103.

as a disease of thought, no doubt ought to have remained as to what I meant. To represent the supreme God as committing every kind of crime, as being deceived by men, as being angry with his wife and violent with his children, is surely proof of a disease, of an unusual condition of thought, or, to speak more clearly, of real madness. It has been supposed that by disease of language I meant no more than certain well-known misapprehensions, such as μῆλα, flocks, for μῆλα, apples, la tour Saint Vrain (Verena) changed to la tour sans venin. These cases form a very small section of mythologic pathology, and they owe their popularity chiefly to the fact that they are amusing and easily intelligible. But I meant much more by a disease of language. I look on the use of an epithet as a subject, of an adjective as a substantive, of deva, bright, as deva, god, and of a plural devâs, gods, as symptoms of a far more serious disease of language. I have ventured to ascribe even scientific words such as light, warmth, electricity, to the same class of unsound words, and I quite agree with R. von Mayer, who declared that they were no better than the gods of Greece.

The cases of diseased language due to a mere misunderstanding, to false etymology, to wrong pronunciation, and similar accidents, are curious no doubt, but they are very slight complaints, and do not touch the deepest springs of mythology. No thoughtful critic could have misunderstood what I meant, and I am glad to see that Mr. Horatio Hale, the Nestor of scientific ethnologists, has fully entered into my thoughts. 'The expression "a disease of language" was too sweeping,' he writes, 'but it

comprises a large measure of truth[1].' He then proceeds to give some very interesting illustrations of that peculiar, but slight disease of language which is due to misunderstanding. A few specimens may be interesting.

Iroquois Stories.

'When four hundred years ago the confederacy of the five (afterwards six) Iroquois nations was established, the three leading personages were Hiawatha (Hayonwatha), Dekanawidah (Tekanawita), and Atotarho. They were historical characters, but they soon became the subject of mythological tales, growing out of the perversion of native terms. Atotarho, a participle of otarhon, signifies entangled, probably one of the many clan names belonging to his gens. But owing to his fierce character the common people speak of him as a terrible wizard, whose head, in lieu of hair, was covered with an entangled mass of living serpents.

'Hiawatha's name, Hayonwatha, derived from ayonni, i.e. wampum belt, and katha, to make, was likewise one of many clan names, but it soon led to the tradition that it was Hiawatha who invented wampum, the Indian shell money and mnemonic symbol, an invention, as proved by the mound relics, that was in use for centuries before his birth.

'The third, Dekanawidah, the proudest among the founders and members of the League, is said to have in a public speech forbidden the use of his

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[1] Journal of American Folklore, vol. iii, No. X. 'Above' and 'Below.'

name by any of his successors. This was the general custom, and was called "the repeated resurrection of a chief." Thus it happened that in Indian metaphor, Dekanawidah was said to have "buried himself" in order to avoid this political resurrection. John Buck (Kanawati), the leading Onondaga chief, told Mr. Horatio Hale, "Some of our people will tell you that Dekanawidah dug a grave and buried himself in it." But they do not understand what the saying means.'

This shows what excellent service ethnologists might render to the study of Comparative Mythology, if instead of misunderstanding or professing to misunderstand a metaphorical expression such as disease of language, they would collect misunderstood metaphors among Onondagas and other savage races. It is true that such instances touch but the skirt of Comparative Mythology, still their explanation helps toward the solution of graver problems.

Mythology as a Psychological Problem.

What we must bear in mind is that mythology belongs no longer to classical scholarship and the *Beaux arts* only, but has become one of the most important problems of psychology. We have to ask the question whether the mind of man was really so constituted that it could create the idea of gods as superhuman and omnipotent beings, and then ascribe to them stories such as are ascribed to Zeus and Hêre, Apollon, Ares, and Aphrodîte. Let us admit that the prevalence of cannibalism may be pleaded as a circonstance atténuante for the strange appetite of Kronos or Dêmêter; but that Zeus should have suspended his wife from the sky, with chains

round her hands, and two anvils fastened to her feet, that he should have taken his son by the foot and dashed him headlong from the sky, till, after falling for a whole day, he alighted with the setting sun on the island of Lemnos, and remained a cripple for life; nay, that this very god, Hêphaistos, should be called the son of Zeus and Hêre, and in another place be represented as the son of Hêre alone, born from her hip, and that, in order to spite her husband who had produced Athêne, fully arrayed, out of his own head—all these are things which the Greeks, however far back we trace them, could never have witnessed, nay which, without some provocation, no human brain could ever have conceived, even in Bedlam. And this is not all. Hesiod tells us that Mêtis, the first wife of Zeus, when she was with child, was kept imprisoned by her husband within his own body, that she might tell him what was good and what was bad. Her unborn child was Athêne, and when she came to be born, her birth had to take place from the head of Zeus. Here we can see, no doubt, a hidden meaning, still the myth that conveys it remains as monstrous as ever. It is easy to say that all these are fables, but that is begging the whole question. It is easy to say that the Greeks knew such things to be untrue or fabulous. Yes, but the question we have to answer is, what is a fabula, i.e. a saying, and how did it arise? If all myths are irrational, how could rational beings have invented them? We may admit an infantia of our race, we cannot admit a period of dementia at the beginning of an evolutionary process of which we ourselves are integral links, if not the last results.

The Hyponoia of Mythology.

All this was felt by ancient philosophers also, though perhaps not so keenly as by ourselves. And however they might differ in their views about mythology, they mostly agreed in suspecting that myths meant originally something different from what they seem to mean, that there was in them in fact a Hyponoia, an under-thought, a true intent, a rational meaning, that the gods were not mere creations of fancy, and the stories about them not mere ravings. But even after it had been admitted that there was some reason in all the unreason of the myths of the ancients, it remained a moot point what that reason, what the rationale of mythology really was, and opinions diverged in every direction, among ancient as well as among modern scholars. It is a great mistake to imagine that the attempt to rationalise the mythologies of the ancient world is a mere fancy of modern philosophers, and that the ancients were satisfied with their fables, such as they were handed down to them from father to son.

Greek Views on the Meaning of Mythology.

Not only in India but in Greece also philosophers knew perfectly well that nothing that was infamous among men could be considered true or honourable, when told of the gods, though it might be true of what was originally represented by the gods. They actually coined a special word *ἀλληγορία*, allegory, meaning the description of one thing under the image of another. As early as the sixth century B. C., Metrodoros of Lampsakos declared that Agamemnon was meant for the ether (*Ἀγαμέμνονα τὸν*

αἰθέρα Μητρόδωρος εἶπεν ἀλληγορικῶς). Plutarch tells us that the Greeks allegorised or interpreted Kronos as chronos, time, and that in the same way the sun (ἥλιος) was recognised by them in Apollon. If any comparative mythologist were to venture to say this now, what an outcry there would be against such a sacrilege against the genius of Greece! It is true that even those philosophers who see in the Greek gods nothing but deified men have likewise a powerful authority in Euhemeros, who said he had discovered, if not the corpse, at least the tomb of Zeus at Knossos. This remedy was really worse than the evil which it was meant to cure.

The best recognised interpretations, however, among the Greeks were the ethical and the physical. The former saw, for instance, in Athêne the representative of wisdom, in Ares that of unwisdom, the latter tried to see very much what we do, namely, physical phenomena represented by divine personalities.

The Gods as representing the Prominent Phenomena of Nature.

Leaving aside all minor questions, all merely fanciful theories, it may be asserted that at present nearly all serious students of mythology are agreed on this fundamental principle that the gods were originally personified representatives of the most prominent phenomena of nature[1], that what we look upon as natural events were taken as the acts of these representatives, and that when

[1] Plato, Kratylos, 397 c, says: *Φαίνονταί μοι οἱ πρῶτοι τῶν ἀνθρώπων τῶν περὶ τὴν Ἑλλάδα τούτους μόνους θεοὺς ἡγεῖσθαι οὕσπερ νῦν πολλοὶ τῶν βαρβάρων, ἥλιον καὶ σελήνην καὶ γῆν καὶ ἄστρα καὶ οὐρανόν.*

once a taste had been created for such marvellous stories as would naturally arise when the tremendous workings of nature had to be described as the acts of individuals, similar stories were readily invented, even when there was no real excuse for them. When gods and goddesses had once been created, and natural phenomena had once been changed into supernatural achievements of the gods, and when a belief had been fostered that the highest excellence reached by human beings was surpassed by the power of these gods, it would be perfectly intelligible that the achievements of real human agents, of powerful heroes and beautiful heroines, might have been so exaggerated as to raise them almost or altogether to the rank of the gods. It might then happen also that stories current about gods and heroes were told about real historical persons, just as in modern times good sayings whose authors are forgotten, are, without hesitation, told of living men who seem likely to have uttered them.

The gods being once given, we can account for goddesses, for heroes and heroines. It is the gods who require explanation, and we know now with perfect certainty that in their first apparition they were simply the agents postulated as behind the most striking phenomena of nature. Whoever holds that opinion is on our side, however much he may differ from us on minor points. Whoever differs from it must be prepared to show from what other source the so-called gods or Devas could have sprung.

The Weather and the Seasons.

If writers unacquainted with the little that is left us of the thoughts and conversations of people before

the existence of anything that can be called literature, whether written or unwritten, go on declaring that those ancient people could not have been such fools as to talk of nothing but the weather—to ask continually, *τί Ζεὺς ποιεῖ ;* 'What is Zeus doing?'—are there no such fools even now? The conversation of peasants, as it is in some of our out of the way villages, or as it was but a few generations ago, would hardly display a much greater variety. Nay, even in the higher classes conversation about the weather seems to me to occupy no inconsiderable share, whether among sportsmen, or sailors, or landlords. We ourselves may talk of times and seasons as if they meant nothing but sunshine and rain. But to the ancients who lived on the soil and to whom labour meant chiefly the labour bestowed on the soil, seasons were really what their name implied, sationes or sowings. On the success of each sowing depended the life not only of the sower, but of his children and his cattle. To know the times and seasons was, at that early time, to know everything ;—to be a weather prophet was to be a prophet.

On this point we owe much to Mannhardt, who has shown again and again what an important element agriculture played in the religion and the mythology of the ancients, and how natural it was that the worship of Dêmêter should have occupied so prominent a place in the religious mysteries of Greece.

To know whether there would be rain or shine, whether it was safe to travel by land or by water, was often a matter of life and death to whole families and villages. It is not so extraordinary, then, that people should have talked about all this.

And now we must remember what was the nature

of their language? It was such that when we speak of sky, wind, thunder, and rain, they would and they could only speak of agents, of a Lighter, a Blower, a Thunderer, a Rainer, that is, of agents, of bright agents (deva). And what are these bright agents but their gods? Fond of mystery as uneducated people are, they invented little saws and sayings, proverbs and riddles, about times and seasons. Does not Herakleitos mention the seasons among the phenomena that led to the conception of gods? does not even St. Paul (Acts xiv. 17) appeal to the rain from heaven and the fruitful seasons as leading the heathen on to a knowledge of God?

Saws about Weather.

Have we not such sayings even now? such as: 'Rain before seven, shine before eleven,' 'The evening grey and morning red make the shepherd don his plaid,' 'The evening red and morning grey are the sign of a very fine day,' 'A rainbow in the morning is the shepherd's warning,' 'A rainbow at night is the shepherd's delight,' 'Three white frosts and then rain,' 'A green Yule makes a fat kirkyard,' 'March winds and April showers bring forth May flowers,' 'If it rains on St. Swithin, it will rain for forty days.' Any old peasant woman would know a hundred more of these saws, in fact their permanent stock of wisdom, whether on the weather, or on food, on health and sickness, on law and justice, nay, on religion and morality also, consisted, and still consists, of nothing but these short saws, sayings, sentences, maxims, or whatever we like to call them, sometimes metrical, rhythmical, or rhymed, but always in a form that would assist the memory in

producing them whenever they seemed to be wanted. At a time therefore when morning, evening, summer and winter, wind and rain were still spoken of as doing this, and bringing that, in fact as personal agents, when the wind was the heavenly child (der Wind, der Wind, das himmlische Kind), the rain a traveller (Rain, rain, go to Spain), the stars unknown friends (Twinkle, twinkle, little star, how I wonder what you are), stories would spring up everywhere, and most of all when children, who learnt these sayings long before they understood a word of them, asked their grandmothers who the heavenly child was, and why the rain travelled to Spain. Grannies would have to supply all that was needed, and with them the heavenly child would naturally become a young prince, and the traveller across the sea a fearful giant and all the rest. Having once heard these stories of a grandmother or an old nurse, the children would clamour for them again and again, and woe to the story-tellers if they forgot anything or made any change. The children would insist on having the old story, and would repeat it word for word among themselves till it became as settled as a chapter of the Bible. We shall see that many of these sayings were preserved in the form of riddles, and that these ancient riddles often became the sources of ancient mythology.

Historical Traditions.

But it is said, with a certain amount of plausibility, that these ancient races must have remembered also something else, some real heroes, some real battles, and that they would have talked and sung of them rather than of the battle between light and darkness,

between day and night, between sunshine and rain, between spring and winter. So it seems, but it has been shown that even in our own time nothing is so striking as the forgetfulness of the people, where there is no printed literature to keep up the memory of great events. Experiments have been made, and it was found that peasants living near Leipzig know nothing of the great battle, except what they may have learnt at school. I myself heard an old woman assuring her friends that after Waterloo Napoleon had been hiding in England for many years, and had at last come back to Paris to fight the Germans. To test the retentiveness of the memory of peasants similar experiments have been made in the neighbourhood of the great battlefields of Frederick the Great. The people all knew some anecdote, more or less mythical, of the Olle Fritze, but of the battles near their own villages, of the position of the armies, of the flight of the enemy, of acts of valour and all the rest, they knew nothing at all. Places are shown where the king is supposed to have jumped on horseback over a river which no one but an old heathen god or a hero could ever have jumped, that is to say, popular legends were beginning to absorb historical reality.

Hahn, who for the same purpose tested the memory of the people of Albania with regard to the great events in their recent history, found it a complete blank. And what they did know of Skanderbeg, their great hero, was here too purely legendary and mythical. They showed the footprints of his charger on a rock on which the national hero had alighted, from a tower of his fortress—all the rest was as if it had never happened.

Common and uneducated people have their own tastes. We have to study them, and not to measure their taste by our own. It is well known that not only saws and stories, but questions and answers also, mostly in the form of riddles, formed an important part of the floating conversational literature of the people. There are voluminous collections of such riddles, both ancient and modern, and in the case of many of them it is difficult to say whether they are new or old; for neither their language nor their contents have hitherto received the attention which they deserve.

Riddles.

I called attention in one of my former books to the importance of riddles for helping us to explain the origin of many a myth, and the fact that M. Victor Henry arrived independently at the same conclusion was to me most welcome, as tending to confirm the truth of my observation. This spontaneous agreement required no explanation or apology from him, for in these matters the question of priority has no place, and, as I have found out since, I was myself anticipated by Russian scholars, such as Afanasief, Orest Miller, and others, who long before me had called attention to the importance of riddles for mythological studies.

Origin of Riddles.

Some of these riddles seem to arise quite spontaneously. Nothing was more natural for the ancient Âryas than to speak of the rising sun as the child of the morning, and of the setting sun as the child of the evening. Nor did it require any poetical effort

to speak of the two as twins, and as the children of day and night. But from another point of view the day might be called the offspring, which would mean no more than the product of the rising sun, and the night the offspring of the setting sun. Thus the riddle was ready at hand. Even a savage might be tempted to ask, How can the sun beget his parents? And this question is actually asked in one of the hymns of the Rig-veda (I, 95, 4): 'Who can comprehend that hidden god (Agni)? The young child has given birth to his mothers.'

The epithet hidden, here applied to Agni (ni*n*ya), might be translated by enigmatical, puzzling, mysterious.

And as soon as one puzzle of this kind has been started, it is soon followed by others. We have only to remember that the rising sun may be called not only the offspring of the morning, but likewise the child of the night, as rising from the lap of the night, while the setting sun may be conceived not only as the offspring of the evening, but likewise as the son and heir of the whole day. That being so, the question would soon be asked why the mother of the rising sun, the night, does not suckle her own child, but leaves it to be attended by the day, whereas the mother of the setting sun, the day, leaves her child to the care of the night. Need we wonder then that one of the poets of the Rig-veda (I, 95, 1) should say: 'The two sisters of different aspects wander along; the one suckles the young of the other[1].' With the one the child is golden (sun), moving by himself,

[1] Anyânyâ can hardly be meant for anything but anyânyasyai.

with the other it is seen bright and full of fine splendour (moon). Very soon another situation involving another riddle follows. The two sisters and mothers who were said to be suckling each the child of the other, are now represented as suckling both the same child. Thus we read, Rv. I, 96, 5, dhâpáyete *sísum* ékam samî*ki*ṅ, the two together suckle the one child, and there is a hint at something like jealousy between the two sisters, when we read that one sister tries to destroy the colour or beauty of the other, vár*n*am âmémyâne.

From such materials riddles sprang up at a very early time. We meet with them in such hymns as I, 152 of the Rig-veda, and we learn from the Brâhma*n*as that at certain sacrifices riddles formed a recognised amusement of the priests.

There was, however, a very serious condition attached to the guessing of some of these riddles, that whoever could not guess them should have his head cut off. This seems a strange measure, and yet we find just the same condition in India (Upanishads), in Greece (Sphinx), in Iceland (Edda), and among the Slaves [1].

Riddles, though rather poor ones, are mentioned in the Old Testament [2], and we meet with a large

[1] Krek, Slav. Literaturgeschichte, pp. 266, 299.

[2] If I call Samson's riddle poor, it is because no one could guess it who did not know the facts to which it referred. Samson had actually seen the carcase of a lion, and in it a swarm of bees and honey. This he put in the form of a riddle, 'Out of the eater (lion) came forth meat, and out of the strong one came forth sweetness (honey).' Samson was quite right in saying that no one could have guessed his riddle unless he had ploughed with his heifer. But we find similar riddles referring to actual facts elsewhere. Gestr, for instance, had seen a dead

number of what may be called mythological riddles among the Finno-Ugrian tribes of the present day. Among ever so many races we find not only finished riddles, but words, phrases, and sayings which, if literally interpreted, would at once be changed into a myth. The poems of Rückert, one of our most thoughtful German poets, are full of these mythological germs. 'Die Morgenröthe wirkt ihr Kleid,' he says, without, as it would seem, being aware that there was anything strange in this utterance. 'The Dawn embroiders her gown,' would be quite intelligible in English also, without any understood reference whether to Penelope weaving at her loom, or the three Weird Sisters spinning their thread. Among Russian riddles quoted by Mannhardt, l. c., p. 216, we find a riddle, 'What is the red gown before the forest and before the grove?' And among the Lets we find a complete story in their popular songs relating how the Sun-daughter (the Dawn) hangs her red gown on the great oak-tree, an expression which hereafter will help us to understand the golden fleece of Hellê (Sûryâ) hung on the oak-tree in Aia.

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horse lying on the ice, and a worm on the carcase, both being carried away by the stream towards the sea, and he asked King Heidreck the riddle: 'I saw the field-increaser of the earth (water, ice) moving along, a dead sat on a dead (a dead horse on the dead ice), a blind one was riding towards the sea on a blind one (the blind worm on the carcase), but the horse was lifeless.'

There are several more riddles of the same kind (Wolf's Zeitschrift, vol. iii, p. 5), but they all want the true character of a riddle. They are metaphrastic descriptions of real facts, and could never have been guessed without a knowledge of these facts.

Again Rückert says quite unconsciously, 'Hoch über'm Wald des Abends Goldnetz hängt,' 'High over the forest hangs the golden net of the evening,' but the Russians have made a riddle of it, and ask, 'What is the gold spun from one window to the other?'

One of the most modern among modern poets, H. Heine, never tires of singing of the commonest events in nature, just like a Vedic *Ri*shi, and yet no one wonders that he should have chosen what are called such hackneyed, such trite and uninteresting subjects.

Sonnenaufgang. Goldne Pfeile
Schiessen nach den weissen Nebeln,
Die sich röten, wie verwandelt,
Und in Glanz und Licht zerrinnen.
Endlich ist der Sieg erfochten,
Und der Tag, der Triumphator,
Tritt, in stralend voller Glorie,
Auf den Nacken des Gebirges.

Another Russian riddle asks, 'What is the tree in the midst of the village and seen in every cottage?' The answer is, the sun and its light, showing how familiar the idea was that the sun grew every day on an unseen tree which was the very oak on which the Sun-daughter hung her red cloak, and which was cut down every evening. A Norwegian riddle asks the same question:—

There stands a tree on the Billing-hill,
Showering over the sea,
Its branches shine like gold,
You won't guess it to-day.

Now we must remember that in a riddle it is necessary to hide something, and not to use the

ordinary names of sun, moon, stars, wind and sky, if the question refers to them.

The Enigmatic Language of Mythology.

And this seems to me to answer to a certain extent a question which has often been asked, why the mythological names, intended clearly for natural phenomena, should be so irregular, so difficult to explain, and evidently so little understood by the people themselves. If a myth passed through the enigmatic stage, as just described, it would of necessity retain such names as Artemis, instead of Selêne, Vulcanus instead of Ignis, Aphrodîte instead of Charis, &c., and if a riddle has once become popular, people would retain its phraseology for ordinary purposes also, just as schoolboys prefer slang, as soon as they have picked it up. Thus if the Lituanians tell us of a princess who wears the sun as her crown, the starry sky as her cloak, the moon as her brooch, whose smile is the dawn, and her tears the rain which, when it falls on the earth, is changed into diamonds, we can hardly doubt that she must be meant for a kind of Hêre (*Svârâ), the bright sky. But when the Lituanians, instead of saying, 'it rains,' say 'the princess Karalune weeps,' we cannot tell what Karalune means, unless we can discover the etymology of the name.

To us all these expressions are interesting, as pregnant with mythology, and we learn here also why it is that the names which are least intelligible in themselves excite the greatest curiosity and gather the largest amount of mythology around them.

I add a few more riddles which, as soon as they

are guessed, nay even before, could not but lead to what we call popular myths or legends.

Gestiblindr asks[1]:—

Who is the Dark one
That goes over the earth,
Swallows water and wood,
But is afraid of the wind,
Not of men,
And challenges the sun to fight?
King Heidreck,
Mind this riddle.

Heidreck answers:—

Thy riddle is easy,
Blind Gest,
To read.
Mist (myrkvi=murk) rises
From Gŷmir's dwelling (the sea),
Hinders the sight of heaven,
And hides the rays
Of the dwarf-cheater (the sun),
And flies only before Fornjöt's son (the wind).

If lightning is called the blue one that runs before the thunder, we see again how easily a myth might spring from such a saying, particularly as it is not quite clear why the lightning should have been called blue. Still that it was so, we see even from the modern German expression, blitz blau[2].

It has sometimes been doubted whether a cloud could be called simply the cow. It is so in the Veda, and that it was so in Germany also, we can learn from the riddle:—'A black-marked cow went over a pillarless bridge, and no man in the land could stop the cow[3].'

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[1] See Mannhardt, German. Mythen., p. 219.

[2] Mannhardt, l. c., p. 2.

[3] Mannhardt, l. c., p. 7.

That the sun should be spoken of simply as the bird (patańga) or the swan (ha*n*sa) has seemed very unlikely, particularly when it was used to explain the change of Zeus into a swan. Yet in Rig-veda I, 164, 46, it is evidently the sun that is called divyá*h* supar*n*á*h* garútmân, the heavenly bird Garutmat, and in X, 149, 3, this same Garutmat is called the bird of Savit*ri*, the sun. If, as we can hardly doubt, the later Garu*d*a is the same word, we find in him the bird on which Vish*n*u is supposed to ride; at his birth he was supposed to be Agni and was praised as the sun [1]. Nor does it seem to require much imagination to speak of the sun as a bird. Anything that flies through the air might in the language of the ancients be spoken of as a bird. Thus even the snow is spoken of as a bird in a well-known riddle which I remember hearing when at school in Dessau :—

Da kam ein Vogel federlos,
Sass auf dem Baume blätterlos;
Da kam die Jungfer mundelos,
Und ass den Vogel federlos,
Hoch auf dem Baume blätterlos.

'There came a bird featherless,
Sat on a tree leafless;
Then came the maid mouthless,
And ate the bird featherless,
High on the tree leafless.'

This old riddle is somewhat spoiled in Latin :—

Volavit volucer sine plumis,
Sedit in arbore sine foliis,
Venit homo absque manibus,
Conscendit illum sine pedibus,

[1] See *S*atapatha-brâhma*n*a IX, 4, 3–5.

Assavit illum sine igne
Comedit illum sine ore.

Indeed it seems to me that a more comprehensive study of old riddles might throw new light on much that is enigmatical (in both senses of the word) in ancient mythology. Sometimes we meet with riddles which are pure mythology, as when we read in a collection of Moravian riddles:—

Tata vysokej
Mama široká,
Dcera slepá,
Syn divokej . . .

Father is high, Mother is broad[1], Daughter is blind, Son is wild; that is, Heaven, Earth, Mist, and Wind[2].

Gods with Intelligible Names.

There are several gods and heroes in Greek mythology whose names speak for themselves. That Hêlios was meant for the sun, and Mêne for the moon, no one, not even the most confirmed Agriologist, would deny. But what has been the result? The myths told of them are of the poorest, thinnest kind; and if the names of all the Greek gods had been equally intelligible, we should probably have had no mythology at all.

Hêlios and Selêne.

If Hêlios was called the son of Hyperîon and Euryphaessa (Hom. hym. V, 11), every Greek would

[1] *Pri*thvî and p*ri*thivî (broad), the regular names for earth in Sanskrit.

[2] Wolf's Zeitschrift, vol. iv, p. 374.

have understood that this meant no more than that the sun is born of the high sky and the wide-shining Dawn; and if then Euryphaessa is elsewhere called Theia, we should know at once that Theia also must have been a name of the Dawn, though the Dawn is generally represented as the mother of Hêlios, Êos, and Selêne, another instance of unsettled family relationship. The sister of Hêlios, whether called Selêne or Mêne or even Artemis, is clearly the moon. Though a sister of Hêlios, who was called the son of Euryphaessa, she is sometimes called the sister of Êos, nay the daughter of Hêlios, thus showing with what freedom the sights of nature could be translated into mythological language. That Pallas (-antis) also can take the place of the father of Selêne shows that this Pallas was likewise of solar origin, and if Pallas was killed by his daughter, Pallas (-adis) Athêne, for threatening violence to her, this only proves once more how the Dawn-goddess can take revenge on her unnatural parents, whether they are called Indra, Pragâpati, or Pallas or Hêphaistos.

If then we are told that Hêlios rises from Ôkeanos in the East, that he ascends the sky, reaches the middle of it at noon, and then descends to dive again into Ôkeanos in the West, where the gates of Hêlios are, and his entrance into darkness, we see before us a simple description of nature, but nothing as yet purely mythological or legendary.

The Boat, and the Herds of Hêlios.

Homer, who relates all this, does not seem to know of the golden boat, in which we are told by

others that Hêlios sailed every night, either round Ôkeanos or beneath the earth from West to East. Still even this golden boat is no more than a physical hypothesis. And if it is said that in the island of Thrînakia or of Erytheia, Hêlios possesses seven herds of oxen, and as many of sheep, each herd numbering fifty head, never more and never less, the number of 7×50, that is, 350, is enough to show that what is meant here are the days of the year, each day having originally been conceived as in the Veda, as a red cow led out in the morning from the dark stable in the East, walking across the sky, and descending into the dark stable in the West.

When we come to the wives and children of Hêlios, we can no longer control the fancy of Greek story-tellers, but most of these names also show that they were invented to indicate the sunny and brilliant character of those who bore them. There is hardly an epithet of Hêlios that does not clearly apply to the sun, and even his statues with their attributes can still be recognised as the representations of a solar hero.

Selêne.

It is the same with Selêne so much so that, if we once know the meaning of her name, we have not to guess her character either from her epithets or from the legends told of her. Her love for Endymion can be nothing but an allegory of the rays of the moon kissing the setting sun (ἔνδυμα)[1]. Her fifty daughters may then be the 4×12 moons or months of the Olympiad with two intercalary moons. If Erse, dew, also is called her daughter,

[1] Chips, iv, 87–92.

this hardly requires any more interpretation than if we said that the dew was the child of the moon. Aeschylus calls Selêne plainly the eye of the night, and if she is represented with two horns (δικέρως), this also speaks for itself.

Apollon and Artemis.

But while with such names as Hêlios and Selêne mythology had hardly a chance, we have only to substitute the names of Apollon and Artemis, and we enter at once into a complete wilderness of myths, many of them perfectly enigmatical, and probably for that very reason all the more popular.

That the Greeks at the time of Homer did not know the meaning of the names of their gods is shown by the very attempts which their poets, and afterwards their philosophers and grammarians, made to fathom their etymology. It has been said that their names were survivals of a more ancient period of the Greek language, and that, being proper names, they remained unchanged, while everything around them was growing and changing. There is no doubt some truth in this, but it hardly explains the whole difficulty.

Gods with many epithets, Hermes.

The gods have generally ever so many names and epithets, but instead of using the more intelligible, the least intelligible seem to have been preferred and to have best survived in mythology. Hermes might have been spoken of as Trophônios, Propylaios, Eriounios, Diaktoros, Argeiphontes. Every one of these names would have conveyed some kind of meaning, though possibly not the right one. But

the name of Hermes was simply unmeaning, and the old principle, 'Omne obscurum pro magnifico,' seems to have guided throughout those who fixed the permanent names of the Greek gods.

Enigmatic Phase of Mythology.

But to revert once more to the subject of riddles, the suggestion which I should like to repeat is, whether the obscurity of many of the names of mythological gods and heroes may not actually be due to the enigmatic stage through which they had to pass, to the riddles to which they had given rise, and which would have ceased to be riddles if the names had been clear and intelligible like those of Hêlios and Selêne.

We see not only in the ancient language of the Veda, but even in the modern language of popular poetry as recited, for instance, by Lettish peasants, a number of expressions which we should call poetical or metaphorical, but which to them seem quite direct. When the Vedic poets speak of the ten sisters, we must understand that they mean the fingers, and translate accordingly. When they speak of the seven sisters, what they mean are the rivers or the dawns. Among the riddles collected by Dr. H. Paasonen in the villages of the Mordvinians, and published in the Journal of the Société Finno-Ougrienne, vol. xii, 1894, we read (no. 74) of the five fingers being called my two mothers, my two daughters, and my grandmother.

In the Veda we have to learn that cow means not only the cloud, but also the dawn, or each day as it moves forward from its stable in the East, to its resting-place in the West.

Some writers who do not know the Veda will laugh and say that this is simply impossible. Yet if they knew their Homer, they ought to know the 350 oxen and sheep of Hêlios, which can be meant for nothing but the days of the year.

When Thunar (thunder) milks his heavenly cows[1] and derives strength from their milk, that is, rain and dew, these cows can only be the clouds. When the Mordvinians ask who are the 355 starlings, they can only mean the days of the year, while the twelve eagles and the fifty-two jackdaws are to them the months and the weeks. When the Veda speaks of the wolf that swallows the Vartikâ (Ortygia) and other brilliant objects, the poet could only have meant by the wolf[2] darkness or night or winter. But if this is called incredible, because it would show the influence of language on thought, what shall we say to the Russian riddle that 'The grey wolf catches the stars in the sky' (Sěryj volkŭ na nehě zvězdy lovitu[3]).

The Golden Apples.

Possibly the golden apples (μῆλα) which perplexed even the ancients and led them to suggest that the apples fetched by Hêrakles from the garden of the Hesperides might have been meant for μῆλα, herds of cattle, may likewise be explained by some of the enigmatic expressions of other mythologies. In the popular songs of the Lets[4] there can be no doubt

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[1] Cf. Rv. I, 33, 10, níh gyótishâ támasah gấh adhukshat (Indra).

[2] Cf. Λυκόκτονος as a name of Apollon.

[3] Krek, l. c., p. 285.

[4] See Mannhardt, Lettische Sonnenmythen, 1875.

about the meaning of the golden apple. It is simply the daily sun, after sunset. Thus we read :—

The dear Sun cries bitterly
In the apple-garden.
The golden apple has fallen
From the apple-tree.
Do not cry, dear little Sun,
God [1] makes another
Of gold, of brass,
Or of the best silver.

And again :—

Get up early, daughter of the Sun,
Wash thy lime-wood table clean,
To-morrow morning the God-sons will come
To hurl the golden apple.

Here everything is perfectly clear, and yet full of mythological promise. We can now understand, not only why here and in the Kalevala, after one apple has fallen from the tree, another has to be made by God, or by a god, of gold or silver or brass; we can also perceive what was meant by any solar hero recovering the golden apple or apples and carrying them back from West to East. We have only to read the endless sayings about the Sun and the Dawn in the Lettish songs in order to be reminded at once of similar terms in other mythologies. Thus the Lets tell us that the Sun bargained her daughter to the Morning Star, but afterwards gave her to the Moon, that the two God-sons (Morning and Evening Stars), instead of being the bridegrooms, had to attend the wedding in order to lead the nuptial chariot (as the Asvins

[1] Like the divine smith who in the Kalevala makes a new moon and a new sun.

also are represented in the Veda as present at the marriage of Sûryâ with Soma, though not as the husbands of the solar goddess, but as her charioteers). Perkuna, the supreme deity with the Lets, is introduced as having his wedding in Germany, that is in the West, and in the morning leading the Sun and her daughter out of the chamber in the East. There is often great confusion between the different representatives of the sun, the dawn, the day, and the morning as members of the same family, and every fancy that suits the poet is welcome and accepted.

In Lettish mythology e.g. the Morning appears not only as the son of the Night, but likewise as the daughter of the Sun (Saules meite), and as the daughter of God (Dĕwo duktele). The Dawn has two brothers, the Morning and Evening Stars, who are represented as her charioteers, but also as her husbands. All this has to be brought into line in order to form a mythological picture. Every single case may be called incredible, but the whole mass of them must carry conviction. Each Slavonic race seems to follow its own fancy, and while the Servians call the Morning Star the sister of the Sun, the sister of the Sun with the Russians is the Dawn. The Slovaks sing of the Zori (Dawn and Gloaming), and of the God-daughters assisted by the Morning Star in harnessing the white horses of the Sun. And are we still to be told that we have no right to recognise in these Slavonic Zoris the Haris or Harits of the Veda, and Χαρίς as well as the Χαρίτες of Homer?

We are told also in the popular Slavonic songs that the Sun (always feminine) ploughs the sky,

harrows it, or sows seed in it. For all this there must have been some hint taken from nature, for we often find parallel expressions in other mythologies. What is peculiar, however, to the Slavonic myths is the consistently feminine character of the Sun. Hence whatever befits a young maiden is ascribed to the Sun-daughter, the Dawn, and also to the Gloaming. The Lets tell us that in the evening she is seen as combing her golden hair, and that her comb is seen at sunset when falling into the sea[1]. When she tries to recover it, a sword (χρυσάωρ) rises from the sea and reaches up to her neck. In the evening she gathers the golden boughs broken from the wonderful oak, in the morning she has to harrow the heavenly meadow, and is asked to rise early to sweep the threshold, to clean the table, and to wash the red cloth that had been bespattered with the drops of blood of the oak-tree. Sometimes the Sun-daughter is supposed to die every night, and hence the stars are called her orphans or simply orphans. A Russian song tells us that—

> The bright sun is the housewife,
> The bright moon the lord,
> And the bright stars the children.

When we remember the meaning of the golden apple or apples in the Lettish popular songs, we may be better able to discover some meaning in the golden apples occurring here and there in Greek mythology.

We know how in Greek mythology the wedding

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[1] Mannhardt, l. c., p. 302, compares the pectines solis et lamiae turres, as told by nutriculae, alluded to by Tertullian, adv. Valentinian., 3.

feasts of solar heroes became often the occasion of discord and battles, and we know the mischief wrought by one famous apple, the golden apple thrown by Eris among the guests at the wedding feast of Pêleus and Thetis.

Montenegro Song of the Golden Apples.

There is a popular song from Montenegro, the poet of which probably never heard of Thetis and Pêleus and the apple of Eris. Yet he tells the story of a beautiful girl, whose legs were golden-yellow up to her knees, and her arms golden-red to her shoulders. A Pasha heard of her beauty, and went with six hundred wedding guests to gain her hand. The girl when she saw them approaching said :—

'Has the Pasha gone mad
That he comes forth and desires for his wife
The sister of the dear Sun,
The brother's daughter of the bright Moon,
And the sister of the Morning Star?'
Then she takes three golden apples,
Throws them high up to the sky;
The six hundred guests are thinking,
Who might catch the golden apples.
Then three lightnings flash out of heaven,
One strikes the youngest leader,
The other fells the Pasha,
And the third kills the six hundred,
So that none was saved to tell us
How they all perished at the wedding.

We must not forget that the girl, though wooed by a Pasha, is still called the sister of the Sun, the niece of the Moon, and the playmate of the Morning Star, and that she was clearly meant for

the Dawn who, when wooed by the demons of the night, hurls forward the apple[1], that is the sun, and kills them all.

The great importance of these popular sayings, popular songs, and popular stories, whether repeated by the ancient Âryas of India, or by some of the Aryan tribes, such as Lets, or Russians, or Germans of the present day, consists in their enabling us to see something of the growth of mythology, that is, the growth of the popular mind, something of what I call the fermentation of mythology, so well known to us from the Veda. Thus, while in the Veda we saw the dawn called the cow, the red cow among the black, we find the Russians asking the riddle, 'How is it that the black cow has tossed and killed all men, and the white cow has brought them back to life?' They ask, Who is the black cow who has stopped the gate, and who is the grey bull who looks through the window[2]?

The Lets sing their songs and ask :—

Why are the grey horses
Standing at the gate of the Sun?
They are the grey horses of the God-sons (Διόσκουροι)
Who won the daughter of the Sun (Sûryâ, Êlectra).
Whose are the grey horses
At God's house-door?
They are the horses of the Moon,
Of those who woo the Sun-daughter (Dawn).
People say that the Moon
Has no horses of his own,

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[1] The bright apple (rúsat píppalam) mentioned in Rv. V, 54, 12 may be the sun, or possibly the lightning, S. B. E. xxxii, p. 331.

[2] Afanasieff, Poet. Naturanschauungen, 1, 659, as quoted by Mannhardt.

The morning star, the evening star,
They are the horses of the Moon.

Here we see the mythological elements shooting together and crystallising before our very eyes into more or less definite forms, such as we are familiar with in most mythologies. We find exactly the same saws in other countries. The Nyassa people speak of the moon as bald-headed, while the Greeks speak of the rays of the sun as the flowing hair of Apollon. Very soon this would lead to a riddle such as we find in Africa, 'Who are the mother and the children in one house, all having bald heads?' The Moon and the Stars[1]. We thus see how easily these popular saws, sayings, and songs would give rise to riddles, and we can see how essential it was that in such mythological riddles the principal agents should not be called by their regular names. The avoidance of the ordinary appellatives and the use of little-known names in most mythologies would thus find an intelligible explanation, though other motives have no doubt acted at the same time and with a similar result. I should like to guard at once against being represented as considering the passage through an enigmatic stage as an explanation of the obscurities of *all* mythological names. This is a stratagem that should be stopped from the very first. I only wish to point out the love of riddles as one out of many causes which contributed towards the shaping of our Aryan mythologies, and in order to fortify my position or supposition, I cannot do better than to

[1] Alice Werner in Zeitschrift für Afrikanische und Oceanische Sprachen, vol. ii, p. 80.

quote a few more of these mythopoeic riddles taken from totally different sources.

Erzjanian Riddles and Myths.

In the article already referred to, by Dr. Paasonen, in the Journal de la Société Finno-Ougrienne[1], fortunately written in German and not in Finnish, we find the following Enigmas on the Thunder :—

(46) Beyond the great water a large old man shouts.

(5) He cannot be felt, he cannot be seen, but his voice is heard,

(6) He cannot be seen, he cannot be felt, but the mind sees him. (Distant thunder.)

(409) A cry from the forest and light from the hill, and the daughter of the Volga trembled. (Thunder and lightning.)

The Sun.

(165) What is the brightest in the world?

(235) A child looks through the hedge. (Sunrise, peep o' day.)

The Sky.

(261) A blue field, strewn with silver.

(390) They are all sheep, they are all sheep, there is one wether among them. (Stars and Moon.)

Winter and Snow.

(101) Who builds a bridge across the water without an axe or plane?

(300) The sun saw her and carried her off; the moon saw her and did not carry her off. (The Snow.)

(316) An old trough and a new cover.

(416) A small white man was sowing, he became very mischievous.

(253) A black coat; from beneath something red appears;

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[1] Erzjanische Zaubersprüche, Opfergebete, Räthsel, Sprichwörter und Märchen.

it remains red nine days, after nine days it becomes green. (Winter-seed, sprouting.)

The Wind.

(278) He moves about, but leaves no trace.

Fire.

(121) A red cock springs from house to house.

(300) Living it is white, when beginning to die it is red, when the breath is gone it is black. (Fire-wood.)

Besides these riddles we find also a number of metaphorical expressions which are used as if they required no commentary. A comb is called a wolf, a flail a goose with beaks of oak, the cat the old woman on the stove, the moon the dark grey horse, the birch-tree the beautiful girl, wearing the same white skirt winter and summer.

It is clear how, out of the abundance of such expressions mythological conceits must inevitably have sprung up.

Mordvinian Riddles and Greek Mythology.

While the Mordvinians ask the question 'What is the fattest of all things?' (the Earth), the Greeks answer not only by calling the soil (Il. xviii, 541) *πίειραν ἄρουραν*, but also by Pîeria, the name of the haunt of the Muses in Thessaly, hence called Pierides. If thunder is once called the old man beyond the great water, if he is believed to shout from the forest and to glare from the hill, we are not very far from the god Donar, the long-bearded father or grandfather who lives in the thunder-mountain (Donnersberg or Thorsberg), and sends the lightning down to the earth (donerstrale).

If the clouded sky is called a blue field strewn with silver, and the wind a wanderer who leaves no

trace behind, if the sun is said to carry off the snow, while the moon leaves her alone (the snow, fem.), if the stars are called the sheep and the moon the wether, have we not here ever so many elements which, in the mind of a poet or of a grandmother, would soon coalesce and form any number of mythological idylls, to the delight of listeners, whether young or old.

Among many other interesting riddles we find among the Mordvinians the famous riddle of the Sphinx in the tragedy of Oedipus :—

(254) In the morning it walks on four, at noon on two, towards evening on three legs.

I doubt whether we have any right to say that it was borrowed from Greece ; at all events we find no other traces of Greek thought among these Finno-Ugrian peasants, and we must try again and again to learn the old lesson that what has happened in one place may have happened in another, and that what has been thought and uttered in the south may have been thought and uttered in the north. On the other hand it must be remembered that wherever Christianity has found an entrance, whether through missionaries, monasteries, or a regularly established church, there was an opening by means of schools and books and sermons through which classical ideas might permeate the folklore of the most remote and as yet uncivilised people. This warning has been addressed to folklorists by James Darmesteter [1], and his warning has been supported by some very curious illustrations.

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[1] Études Iraniennes, vol. ii, p. 242.

Mythology, no System.

In trying to unravel the enormous mass of mythology handed down by tradition from age to age, much mischief has been done by looking upon it as a system, as something orderly and well-arranged, as something carried out according to a preconceived plan, and not as a concourse of atoms, as a mass of momentary thoughts well shaken together before they crystallised into some harmonious shape.

Mythographi.

Beginning with the Greek Mythographi, such as Palaiphatos, Herakleides, or rather Herakleitos (325 B.C.), and Apollodoros [1] (140 B.C.), most students of mythology seem to have regarded mythology as a finished system. They derived their information chiefly from ancient poems, particularly those of Homer and Hesiod, and made them the groundwork of their systems of interpretation, whether physical, ethical, or historical, while the thought that Homer and Hesiod were only the last representatives of a vast accumulation of popular tradition never entered their minds. If they paid any attention at all to local traditions, temple stories, or to the accounts of individual poets, they mostly treated them as deviations from recognised mythological standards, never as of equal authority with Homer and Hesiod [2]. Hence arose the idea, first started by Herodotus, that Homer and Hesiod had made the

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[1] His work Περὶ θεῶν, which treated on the character of the gods with the help of etymology, is lost.

[2] See on this subject, Nachklänge prähistorischen Volksglaubens in Homer, by Dr. W. Schwartz, 1894.

mythology of the Greeks, an idea which contains some truth, if we take made in the sense of fixed, but which, as expressed by Herodotus, has done much mischief and rendered it almost impossible to recognise the true nature of mythology as a natural product of popular thought, as an inevitable outcome of popular conversation. It is only in very recent times that this theory of Herodotus has been replaced by a truer one, and that popular traditions or folklore have received their rightful place by the side of the classical fables of Homer and Hesiod.

The Brothers Grimm, Schwartz, Castrén.

This was chiefly due to the researches originated by the brothers Grimm. They had themselves to create a Teutonic mythology, and as there was no Homer and no Hesiod, no recognised supreme authority to follow, they felt at liberty to co-ordinate freely every tradition they could recover from among the people, bearing either on the great gods, such as Wuotan, Donar, and Zio, or on heroes, such as Irmino, Orentil, Eigil or Wielant. It is true that even Grimm has created a kind of aristocratic Teutonic mythology, and that he has often treated the current fables and superstitions of the common people in Germany as mere corruptions of that higher mythology. I doubt, however, whether the charge brought against him by Schwartz and others is quite just. The brothers Grimm were the most conscientious collectors of popular stories and customs, unrivalled by any of their successors in their accuracy and honesty, and if they saw in some of the popular traditions mere secondary variations of the great divine myths, they also discovered in many

local traditions remnants of the most ancient stock of mythological folklore. On the other hand, after Grimm had opened our eyes, no one could fail to recognise in several of the local heroes reflections of the ancient gods, and in their acts repetitions of the acts recorded of the gods. The only question is how such similarities are to be explained. Castrén, who takes the same view as Grimm, says[1]: 'Nothing is more common in heathen religions than gods being changed and turned into human beings. It belongs to the very nature of polytheism that the gods assume step by step a human form. For as soon as a religion recognises many gods, the activity of the one must be limited and determined by that of the others, so that every single god becomes a finite being.' In this sense a famous scholar has said: 'The more the differences between the single gods stand forth, the more they become defined and finite, the more they become human, till at last they stand altogether outside the sphere of the divine, as mere men, and therefore no longer objects of belief, but, at the best, historical persons.'

Had Gods and Heroes a Common Origin?

I am, however, inclined to agree with Schwartz so far that I do not think that all heroes or demi-gods should be explained as being by necessity mere corruptions of the great deities. Some of them may well be accepted as parallel formations from the very beginning. It is clear that when the agents behind the various phenomena of nature had been raised to the dignity of Devas (bright beings) or Amṛitas

[1] Finnische Mythologie, p. 307.

(immortals), some acts would cling to them which were not quite in keeping with the character of superhuman beings, nay which would be derogatory to beings raised to so high a position as Ζεὺς μέγιστος ἄριστος.

Naturalia non sunt turpia.

'Naturalia non sunt turpia' may be true from a philosophical point of view, but with beings that were to be raised beyond the highest standard of humanity to the rank of immortal gods, certain naturalia must, in the eyes of many of their worshippers, have seemed decidedly turpia. It is extraordinary how long the Greek mind submitted to this almost inevitable degradation of their gods, particularly of the Father of gods and men, Zeus or Jupiter. Thefts, adulteries, and lies were ascribed to him[1], and far from being higher than his mortal worshippers, he was represented in many of his acts as decidedly lower than the lowest of men. If we once know the origin of the Devas, we can understand that it would have been difficult to avoid this mischance. For instance, Zeus, as the god of the sky, might seem married to the Earth (Dêmêtêr) as his legitimate wife, but the air (Hêre) also might claim him as her lord; and in many places where he was worshipped he was naturally called the father of the country, the lover of its principal river, the ancestor of its royal race. This led inevitably to complications which, if expressed in ordinary language, became most compromising to the character

[1] Cf. Sext. Emp. adv. Math. i, 289, κλέπτειν, μοιχεύειν τε καὶ ἀλλήλους ἀπατεύειν.

of Zeus as a husband. We find similar complications even in the Veda. The sky is there also called the father of the Dawn, but the same sky may be conceived likewise as the lover of the Dawn, for when does the sky shine brighter than when embraced by the Dawn? And hence the immediate charge of incest brought against the supreme deity of the Vedic religion, when the Dawn, his radiant daughter, was spoken of by other poets as his beautiful wife. The same difficulty occurs again and again in other mythologies, for instance in that of the Fins, as described by Castrén.

One can hardly understand how such beings can have been tolerated, unless we admit a faint recollection of their original meaning, at all events among the more cultivated classes, whether in Greece, in India, or in Finland.

Heroes parallel with Gods.

But the question of the relation of heroes or demigods to the gods, which was so fully discussed by Grimm, Schwartz, and others, admits of another solution also. There must have been cases where, from the very beginning, the exploits of these deities, more particularly of solar deities, were related in so homely and so realistic a fashion that, from the very first, the chief agents in them could never have been taken for immortals, but must have assumed at once the character of less divine and almost human beings, or at all events of beings but little above the measure of ordinary mortals. These so-called demigods or heroes, such as Hêrakles, often share certain epithets in common with their relatives among the gods. They are often called the children of divine

fathers and of human mothers. They even receive a recognised worship, and are sometimes allowed in the end to join the company of the gods. This shows once more why we need not with Grimm take all heroes of popular tales as corruptions of the gods whose character they share, but may accept some of them at least, as sprung from the same source with the gods, only turned from the first into a different channel.

Helena both Goddess and Heroine.

It is well known, for instance, that Helena was a goddess, and had her own temples and worship in Greece. But it does not follow that this goddess became afterwards Helen, whether carried off by Theseus to Aphidnae, or by Paris to Troy.

Such a process would be difficult to understand, while it becomes intelligible as soon as we admit a cluster of legends springing up about the name of Helena, some of them combining to form the image of a goddess, others the image of a heroine. It does not signify at this point of our inquiry whether we assign to the name of Helena the original meaning of Dawn (Saramâ) or of Moon (Selêne). It suffices, if we want to account for the co-existence of a goddess and of a heroine Helena, that we should remember how her extremely human characteristics could have been gathered up in the beautiful heroine only, while her superhuman qualities fitted her for divine honours such as she certainly received in ancient Greece [1]. In this way the objections raised by Schwartz against Grimm's system may be re-

[1] Th. Heicks, De Helena Dea, Sigmaringen, 1863.

moved, and yet the process of the simultaneous origin of gods and heroes from similar antecedents be fully accounted for.

Dr. Hahn on Märchen.

This question has been very fully discussed by Hahn in his important work, Sagwissenschaftliche Studien. On page 51 he writes: 'We are forced to admit that the traditions produced by the most ancient races are not worked up in their completeness in what we possess of their mythology of gods and heroes. A considerable portion of these primordial thoughts has been preserved to the present day, nay, in spite of its enormous age we see it growing with undiminished vigour in the popular mind, and powerfully reacting upon it. This is proved by the existence of the Märchen, and the palpable relationship of the Märchen among people of the same origin.' After pointing out the difficulties which stand in the way of admitting a mere borrowing of Märchen by one race from another, Dr. Hahn shows that a careful analysis of these popular stories discloses, as their original contents, the same natural phenomena which supplied the material of the mythical stories of gods and heroes, clothed in a more homely form. The origin of these Märchen, which we find to the present day in the different branches of the Aryan family of speech, is referred by him to a period preceding the Aryan separation. In all this he may be perfectly right, but he is wrong when he declines to take into account the historical and much later migration of fables from India to Europe, which Benfey has proved by evidence which cannot be

questioned. If we remove all that has been shown to have been imported in historical times from India to Europe from station to station, from Sanskrit to Pahlavi, to Arabic, Greek, Hebrew, Latin, &c., there remains still plenty of popular tradition that has to be accounted for in other ways. Benfey's facts, it seems to me, are unassailable, and the results established by Hahn are not in any conflict with Benfey's system. The process is exactly the same as when, by the side of a large number of common Aryan words, we find in English a class of foreign names exported in historical times from India or Persia to the British Isles, or from Greek or Latin to Gothic. The two facts are perfectly compatible, nay, it happens but seldom that we are left in doubt whether any of these fables form part of the common Aryan heirloom or are imports of a later time.

Beginnings of Mythology Lost.

We should never forget how limited our knowledge of ancient popular tradition really is, even in the case of Hindus and Greeks, and how the earliest chapters of mythology are lost to us for ever. To the Greeks the Homeric poems were the most distant background of their mythology and religion, nay, of their history also; to us they are a beautifully painted curtain which must be lifted before we can hope to see the earliest acts of the drama of mythology, or to recognise the original actors and the natural scenery by which they were surrounded.

How true are the words of Kekulé in his Entstehung der Götterideale, 1877, when he describes Greek mythology as a mere fragment taken from

the worlds of metaphor and dreams piled one upon the other by the hand of man, or as one page torn from the great picture-book of nature, for which nothing is too small, nothing too sublime.

'Then,' he continues, 'as soon as one of these pictures ceases to be intelligible to later generations, and becomes a mere name, a new metaphor, a new form, a new poem rises from the well of language and poetry to represent the same natural phenomenon in its coming and going, till that living fountain is wellnigh dried up, though it never dries up altogether, always sending up new figures, only less powerful than before, till of the unforgotten, mighty, primeval notes and metaphors of nature's own poetry nothing remains but the names and persons of gods and heroes, with their stories which send forth fresh shoots without ceasing.'

Schelling.

It was Schelling, I believe, who was the first to complain of the 'shallowness of any admiration for Homer which is not founded on a perception of the remote past, left behind (überwunden) by his creations.' It was only after Schelling's death that by means of Comparative Philology and Comparative Mythology it became possible to lift, to a certain extent, the curtain which, as he well saw, divided the Homeric present from the Homeric past. With every year we have learnt more and more how very modern the Homeric poems really are, I mean, how much they presuppose, and how much of the rich growth of religious and mythological folklore they leave unnoticed. If the Iliad gives us a small fragment only of the Siege of Troy, both Iliad and Odyssey give us a still smaller fragment only

of the vast treasure of the widely scattered myths, traditions, legends, and superstitions of the Greek people in its numerous branches.

And what applies to Greek applies to all mythologies, even to that of the Veda, though here, better than anywhere else, we are sometimes allowed to watch the very process of fermentation which always precedes the birth of real mythology.

The Original Elements of Mythology.

From all that has been learnt, partly from a study of the Veda, partly also from a scholarlike analysis of remnants of ancient mythology among other races, the conclusions reached, and now most generally adopted with regard to the origin of mythology in general, may be summed up as follows.

The process by which what are called the gods, whether Devas, or Θεοί, or Dii, or tívar, were originally called into being, was perfectly natural, nay, it was inevitable. We ourselves, living on the vast accumulated wealth of language, i. e. thought, are enabled to speak of natural forces which produce a thunderstorm, with its lightnings and showers; but what could the ancients have said? They had no word, no thought, for forces in our sense of the word. And perhaps it was fortunate that they had not, for what do we ourselves mean by forces in their substantial character? They are, to repeat once more the words of R. von Mayer, no better than the gods of Greece. If the ancient Greeks or the Âryas of India began to ask, whence came rain and lightning, whence sprang hail and snow, heat and cold, day and night, coming and going in regular or irregular succession, they could only

speak of agents and workers, as they spoke of agents and workers who had ploughed the land, forged the iron, or built a hut. And this arose not only from a necessity of thought, but at the same time from a necessity of language. If they wished to form the first names for the wind, or the fire, or the sun by names such as alone their language could produce, they had to make use of the same radical elements from which all their words had been derived, i.e. the so-called roots, their earliest predicates, their earliest abstractions, their earliest general terms. Without general terms there can be no names, except imitations like cuckoo or bow-wow. As they called a potter a kneader or shaper, from a root dih, to knead, to shape, and a butcher a dissecter, *s*amitri, from *s*am, used in the sense of preparing or making ready, they called the wind a blower, Vâyu, from vâ, to blow; they called the sun Savit*ri*, from su, to stir, the cloud Megha, from mih, to moisten, or Par*g*anya, from a root meaning to sprinkle, preserved in a-spergo[1]. By creating these names they created their Devas, whose Devahood, that is whose brightness, and afterwards divinity, was but the general complement of their physical activity.

If the first idea of an object arose, as Noiré has shown, from the consciousness of an opus operatum, a cave dug out or a flint polished, the idea of cause was realised for the first time in the consciousness of an act, of force exercised by man himself, and in the recognition of the Devas, or what we call the forces of nature, the nomina agentis of mythology. Most of

[1] See M. M., India, &c., p. 227 seq.

the Aryan roots expressed actions, and hence the names given to the great phenomena or activities of nature could not be anything but what they are, nomina agentis. I need not enter once more into the question of the origin of roots, the origin of origins, so to say, or explain once more why roots were naturally expressive of actions, as these questions have been fully treated in my Science of Thought. Suffice it to state that no attempt at going beyond or analysing these roots either phonetically or logically has hitherto led to any results likely to benefit the student of mythology, though as a philosophical problem the origin of roots will always continue to exercise its charm on human curiosity. To say that these roots are emotional is saying no more than that all the impressions of our senses are emotional, and cannot be anything else.

To us, however, these roots are historical monuments, more ancient than any human monuments on the face of the whole earth. Being roots they could never have existed by themselves, but they were that without which no words could have existed. To us they are of course abstractions, gathered from the various words in which they occur. But in order to occur in those various words they had to be something real and independent, just as the threads, before they could be woven into any kind of tissue, had to exist in the hands of the weavers. When these roots had once been used for forming names of objects that could be comprehended under them, the Aryan speakers found themselves in possession of such words as Agni, Indra, Ushas, and all the rest. Agni, the fire, meant originally no more than the agile, the swift mover, Vahni meant much the

same, so did Bhuranyu and other names of fire. Indra meant the moistener, Ushas, the shiner. Besides expressing, however, these general activities, these names had a more definite purpose also, and they reminded those who used them of many things besides the simple acts expressed by their roots. Agni to the minds and memories of those who had formed that name was not only the quivering and flashing light, or the source of warmth and light on the hearth of every house, he was also the devourer of forests, the fatal lightning bursting from the clouds, the fiery ball rising every day from the ocean and vanishing again in the waters which had given him birth. He was remembered as struck out of flint, as rubbed from two sticks, as hiding in the wood, as hidden during the night in the waters, nay, judging from the warmth of the body, he was supposed to be dwelling even within us. Indra again was not simply the giver of rain, important as that primary function of his was in hot countries; he was at the same time the wielder of the thunderbolt, the warrior fighting against the black clouds, the conqueror of their strongholds and deliverer of their prisoners. It was he who broke open their stable, and rescued the imprisoned cows, i. e. the waters of the clouds or the bright dawns of the morning, the beautiful dawn-maidens. The more terrible the thunderclouds which he had to fight, the more powerful became the hero who could tear them all to pieces, and make them yield their hidden treasures, whether water or light. Ushas again, the Dawn, was not only the bright light of the morning, she was the bringer of light and life, illuminating the whole sky, heralding the sun, flying before him,

and at last vanishing in the fiery embraces of her pursuer. There may be difference of opinion on the exact etymology of these divine names; there can be none as to the fact that they all had an etymology, and that originally they all expressed the prominent actors in the never-ceasing drama of nature.

Male and Female Agents.

Here we can see the first inevitable steps from mere agents to agents conceived as male and female. Agni and Indra would naturally remain male heroes, but the Dawn, originally ushas, and grammatically as yet neither masculine nor feminine, would as followed by the sun, as being loved by him, as seen fleeing before him, be naturally adorned with feminine epithets only. She would become an Ushâs, or *Ushâsâ, an Êos, or Aurora, a woman, a so-called goddess, and serve as a type or example soon to be followed by other physical agents, such as the moon, the waters, or the earth, all frequently, though by no means always, conceived as female characters.

Common Epithets of Physical Agents.

From sharing some of their attributes in common, some of these unseen agents behind the veil of nature were soon spoken of by general names, whether as bright, i. e. deva, or as living, i. e. asura [1], or as not ageing, i. e. a*g*ara, or as never fading and dying, i. e. am*r*ita, immortal. Sometimes the name of one of them would be extended to others, as, for instance, in Finnish, where Jumala is the name of the agent of the sky, or the thunder, but is after-

[1] Asura is taken by Oldenberg as meaning possessed of miraculous power, wundermächtig; why?

wards extended to other deities also, so as to become in the end a name for gods in general. In Pâli, Maru, originally a name of the storm-gods, has become a name for gods in general[1]. In Mongolian, also, tengri, originally the name of the sky and the god of the sky, comes afterwards to be used in the general sense of gods or spirits.

The Vedic Devas were to Dyaus what the Mongolian tengri were to Tengri. They were called immortal because they were always there. They had been known to fathers, grandfathers, and great-grandfathers, and they would be known as the same by children, grandchildren, and great-grandchildren. Who then was immortal, if they were not?

What are the Devas?

People speak so thoughtlessly, not to say foolishly, about the gods of various Aryan mythologies and their relation to each other, that it really seems necessary to remind them that not one of the gods ever possessed any substantive existence. There never was a Dyaus or a Mitra and Varuṇa, there never was a Zeus or a Jupiter. These gods are names in the fullest sense of the word, they are concepts or creations of the human brain, thus teaching us a lesson which is capable of much wider application. It is true that the conception of all the ancient Aryan gods was suggested by what we call real objects, by the great phenomena of nature, but they were fashioned as divine personalities by the mind of man (nâmarûpa). Even such names as Agni, fire, Sûrya or Hêlios, sun, Ushas or Êos, dawn, though representing the activities of real, of palpable or

[1] S. B. E., vol. xxxii, p. xxiv.

visible things, were never meant simply for the material fire, for the fiery globe, or for the rosy light of the morning, that appeared and vanished every day. As soon as they were used mythologically, they stood for ideas framed by men who not only saw and stared, but who thought and adored. Agni was not confined to the hearth, but wherever there was light or warmth, whether on earth or in heaven, there was Agni. He was there from the beginning, and he was in these many places, not, as is generally supposed, as the result of a philosophical syncretism, but in consequence of his unbroken manifestation under various forms. Nor was even Sûryâ, the sun, confined to the sky. As Savit*ri* he was supposed to pervade all living things, as Vish*n*u he stepped across the air, as Mitra he was the delight of the whole world. It seems almost absurd that we should have to insist on these plain facts, but from the way in which some scholars speak of gods and heroes and ancestral spirits, one would almost think that these beings had some substantive existence, that they had lived in India, and had migrated through the clouds to Persia, to Asia Minor, Greece, and Italy, to say nothing of Russia, Germany, and Gaul.

True Meaning of Deva.

We should always remember that if the *Ri*shis called the sky, the sun, the moon, and the dawn deva, it is we who have translated this word which meant originally bright, by god. If we could ask the Vedic *Ri*shis what they really meant by calling a number of physical phenomena, or the agents behind them, devas, they would probably

find the same difficulty in answering such a question which the Greeks felt when they were asked why they called Zeus and Apollo gods, θεοί, nay, which the Jews might feel, if asked why they called Jehovah God, or the Christians when asked why they gave the same name not only to the Father, but also to the Son and to the Holy Ghost. These are questions which it is easy to ask, but which it is almost useless to attempt to answer. We must be satisfied with what history teaches us, with the fact that the Vedic poets called sky, sun and moon, dawn and fire, at first deva, bright, and that afterwards they extended that name, in a more abstract sense, to other phenomena of nature, such as the earth, water, storm, rain, nay even the night, though they certainly were not bright, so that deva in the end meant something indefinable which all these agents shared in common. Whenever the ancients speak of or to these Devas, all we are justified in saying is that they conceived them as bright agents[1], without asking as yet any further questions. We cannot say that the Devas were conceived from the first as men, or as animals, or as spirits, or as ghosts, or as fetishes, or as totems, at least there is no tangible evidence in support of any of these views. These gods were simply agents, though they were soon spoken of, even in the Veda, as possessing heads and arms and legs and eyes and ears.

One can understand that it would be difficult to define what kind of beings the Greeks thought Zeus and Apollon and Athêne to have been. But anybody who knows the Veda would not hesitate for

[1] Gifford Lectures, vol. ii, p. 132.

one moment to say that when the *Ri*shis addressed Dyaus, they meant the sky in all its aspects, but always as a subject, as active, as an agent. When they spoke of Ushas, they thought of her not only as an agent, but, in addition to that, as a female agent. When they invoked the Maruts, they meant a whole class of active beings manifested in thunder, lightning, and rain. Here lies the immense advantage of the Veda.

Mitra and Varu*n*a.

For even if we go a step further and ask what was meant by names no longer used in their appellative character, such as Mitra, Varu*n*a, Rudra, and all the rest, we can gather from the predicates applied to them that Mitra was originally the agent of the bright morning, Varu*n*a of the evening sky, and Rudra of the thunderstorm. Only we must not restrict the sphere of activity of these Devas too narrowly, by translating their names by words which with us have been restricted to a much more narrower sphere. Mitra represents not only the morning sun, but the light of the morning, the day in all its brightness, while Varu*n*a is meant not only for the covering sky, but for the evening or the night, nay for the setting sun; it may be even for the moon with the stars, as integral parts of the covering sky[1]. When the sun had once been called the light of day or the eye (*k*akshus) of Mitra or of the bright Devas[2], the moon would soon be called the bright-

[1] Il. viii, 555, ὡς δ' ὅτ' ἐν οὐρανῷ ἄστρα φαεινὴν ἀμφὶ σελήνην. Ahuramazda (an original Varu*n*a) says of himself even in so late a work as the Bundehesh, xxx, 5, 'When by me sun and moon and stars are conducted in the firmament (andarvai).'

[2] Maitr. Sa*m*h. IV, 2, 1, Asau vâ âdityo devânâ*m* *k*akshus.

ness of the night, or the eye of Varuṇa and the departed spirits[1]. All this is intelligible, if we do not attempt to define too much, if we do not ask questions such as would never have presented themselves to the minds of the Vedic Âryas.

The Names of the Devas in Modern Sanskrit, or in Zend.

Another great advantage which the Veda offers to students of mythology is this, that even words which have become mere names, such as Mitra and Varuṇa, often disclose their etymological meaning either in later Sanskrit, or in the closely allied dialect of ancient Persia. Thus mitra, m., may still be used in ordinary Sanskrit for the sun, and mitra-udaya is the commonest word for sunrise. In Zend, Mithra is represented as the lord of wide pastures with ten thousand eyes[2]. Four heavenly steeds, white and shining, carry him forward, and as he represents the light of the morning, being bright and clear himself, he is supposed to see and to know everything, and is called the destroyer of darkness, and of the powers of darkness, such as Yâtus, Pairikas, &c., the protector of truth and the avenger of untruth. Even when in later times the worship of Mithra had been imported into Italy, we find inscriptions such as 'Deo invicto Soli Mithrae,' showing that the solar beginnings of the god were not quite forgotten, even in foreign countries. Mitra begins with the sun and ends with the sun (mihr in modern Persian is the sun), and though Varuṇa cannot be analysed

[1] Sâṅkh. Śraut. Sûtra III, 16, 2, Kandramâ vai pitṛîṇâm kakshus.

[2] See Mihir Yasht, S.B.E., vol. xxiii, p. 119.

with the same completeness, still being clearly the complementary deity of Mitra, we cannot doubt for one moment that he was conceived from the first as the dark covering sky, as the evening, as the West, and therefore as occasionally connected with sun and moon also. It is idle to ask such questions as how the sun can be Mitra and likewise the eye of Mitra, and how the moon can be the eye of the Fathers, and at the same time the abode of the Fathers? In Vedic literature we have to deal with independent poets, every one of whom has a right to think and to speak in his own way, unrestrained as yet by any system. Why then should not one poet call the sun Mitra, and another the eye of Mitra? Why should not Varuna be the over-arching sky, and yet be represented as enthroned in the sky, clothed in his cloak and surrounded by his spies?

Complementary Devas.

Lastly, though originally Varuna was all that Mitra was not, and vice versâ, still there was much of the heavenly work, of the return of day and night, that might fall to the share of both gods. Hence they are frequently invoked as a dual deity, as Mitra-Varunau, or even as Mitrâ, the two Mitras, or Varunâ, the two Varunas. The sun is then called the eye of both, of Mitra and Varuna (Rig-veda VII, 61).

All this is perfectly intelligible if we do not refine too much, if we do not imagine that the Veda was built up according to a systematic plan, if we do not perplex ourselves with questions which had no existence in a mythopoeic age. People seem bent on misunderstanding each other. If Mitra is said

to be the sun, they say at once, surely not the visible, the material sun. If Apollon is called a solar god, they protest that no Greek would ever have recognised Apollon in the sun above their heads. But who ever said so? When we say that Apollon was the sun, people ought by this time to know what is meant by such an expression, and that no more can be meant than when Louis XIV said, 'L'état c'est moi.' Even when people call Zeus a solar or Hêre a lunar deity, they do not mean what Plutarch said (Quaestiones Rom. lxxvii), that Zeus himself in his substance was the sun, and Hêre herself in her substance was the moon, but simply that the elements from which the character of these deities was elaborated were from the first taken from the sun and the moon. To say that no Greek would have recognised Apollon in the sun, is a strong assertion, considering his names of Phoibos, Xanthos, Chrysokomes, Lykoktonos, Enauros, or in Latin Matutinus [1].

Every deity rests on something visible, though it is not that something which is visible, but something invisible within or behind. It is in one sense the infinite behind the finite, the ever-varying object of all religious aspirations; the agent postulated to account for certain acts, the cause or force postulated to account for certain effects. All these things are known or ought to be known by this time. What still remains for the comparative philologist to do is to prove the presence of the material beginnings of each deity, to lay bare what we call the solar, lunar, vernal,

[1] Cf. v. Schroeder, K. Z., xxix, p. 195; v. Willamowitz, Hermes, xviii, 406; Indogerm. Forschungen, iv, 173.

hibernal, or any other ingredients which give to each god his own peculiar character. When we have to deal with gods such as Sûrya or Hêlios, the names suffice. But in other cases, such as that of Mitra or Varu*n*a, we must go further and discover for ourselves in some of their epithets, in certain legends told about them or in prayers addressed to them, the true constituent elements of their character, such as it was imagined by their worshippers. It is true that when the agents behind the phenomena of nature have once become Devas or gods, they often lose the traces of their physical character; they are simply conceived as ideal, all-powerful, all-wise beings who are able to reward or to punish the children of men.

Thus in many of the verses addressed to Mitra in the Veda, we find him represented no longer as connected with the sun, but as greater than heaven and earth, nay as supporting all the gods, as watching with open eyes over the whole world, and as protecting those who obey his commands[1]. It may be said that in that case Mitra is no longer the sun, the material and visible sun. He never was that. But is he therefore a fetish, or a totem, or an ancestral spirit? If we call Mitra the god of the sun, we use a phrase which no Vedic poet would ever use. He could not speak of a deva*h* sûryasya, a god of the sun. To him the deva Mitra would express the agent within or behind the sun, but whether he would distinguish the agent, as such, from the sphere of his agency, is more than we can say. All we can do, if we wish to understand the hymns of the Rig-veda, is to watch the historical process by

[1] Rig-veda X, 1, 41.

which in the minds of the ancient Âryas the sun, by a kind of involuntary abstraction, became slowly divested of its purely material attributes, and was raised gradually to a higher and higher, nay to a supernatural rank, as the supporter of the world, the bringer of light, the guardian of truth, the avenger of evil, the friend of man.

Mitra and Varuna.

There is unfortunately one hymn only in the Veda addressed to Mitra exclusively. Generally Mitra is so closely united with Varuna, that the two seem to form but one deity [1], and it is in that united capacity, as the two Mitras or the two Varunas, that they make the sky to shine, send down rain, look down from heaven, dispel darkness and falsehood, are lords of light and right, righteous themselves, avengers of falsehood, and deliverers from evil. Yet they are distinguished from each other even by the poets who address them in common. Varuna is called the lord, the unconquerable guide, and thus far, the greater of the two; Mitra is praised as calling man back to his work (Rig-veda VII, 36, 2) in the morning. If in the compound name Mitra always stands first, this may be due either to a recollection that as representing the rising sun Mitra was originally the principal and more important partner, but it may also be due to the well-known fact that in all Dvandvas the shorter word comes first (Pân. II, 2, 34).

In the Avesta the name of Varuna has vanished, but his place as the twin companion of Mithra has been taken by no less a deity than Ahura (Mazda)

[1] Muir, Original Sanskrit Texts, v, 68.

himself[1]. It would be wrong to say that the Vedic Varuna has become Ahura Mazda in the Avesta. No individual god ever becomes another individual god, and there are things ascribed to Ahura Mazda which were never ascribed to Varuna. Thus Ahura Mazda is said to have created Mithra, a paternity never claimed by Varuna. But the place and position of the Asura Varuna as the most powerful and sometimes supreme deity has certainly been taken in the Avesta by him who is called Ahura κατ' ἐξοχήν, that is Ahura Mazda or Ormazd. Mithra is in that case lord of wide pastures, who has a thousand ears and ten thousand eyes, and he is invoked with Ahura just as Mitra was invoked with Varuna. Thus we read in the Mihir Yasht, XXVIII, 113, 'May Mithra and Ahura (instead of Mitrâ-Varunau in the Veda[2]), the high gods, come to us for help;' and again, XXXV, 145, 'We sacrifice unto Mithra and Ahura, the two great, imperishable, holy gods;' and Khorshad Nyâyish 6, 'We sacrifice unto the bright, undying, shining, swift-horsed Sun; we sacrifice unto Mithra, the lord of wide pastures, who is truth-speaking, a chief in assemblies, with a thousand ears, well shapen, with ten thousand ears, high, with full knowledge, strong, sleepless, and ever awake; we sacrifice unto Mithra, the lord of all countries, whom Ahura Mazda made the most glorious of all the gods in the world unseen. So may Mithra

[1] Though it seems impossible to identify Ahurô mazdâo with the Vedic Asuro vedhâh, on account of the initial consonants m in Zend and v in Sanskrit, their substantial identity can no longer be doubted.

[2] Like Mitrâ, the two Mitras, and Varunâ, the two Varunas, we find in the Avesta also such forms as Ahuraêibya Mithraêibya.

and Ahura, the two great gods, come to us for help.' Here we see as it were before our eyes the growth of a solar god, disengaging himself from his physical antecedents, and rising higher and higher to the stage of a moral and purely spiritual being. It might seem even as if a distinction was made between the Sun and Mithra, but that distinction only shows that Mithra had risen above his original cradle, and that therefore he might be said to come before the Sun, and to be the lord of the Sun.

This becomes very clear if we compare Vendidad XXI, iii, with the Mihir Yasht IV. In the former passage we find the sun, the moon, and the stars invoked :—

'Up! rise up and roll along! thou swift-horsed sun, above Hara Berezaiti[1], and produce light for the world. . . .'

'Up! rise up, thou moon, that dost keep in thee the seed of the bull, rise up above Hara Berezaiti, and produce light for the world. . . .'

'Up! rise up, ye stars, that have in you the seed of waters, rise up above Hara Berezaiti, and produce light for the world. . . .'

In the Mihir Yasht we read: 'We sacrifice unto Mithra, the lord of wide pastures, . . . sleepless, and ever awake;' 'Who first of the heavenly gods reaches over the Hara, before the undying, swift-horsed sun who, foremost in golden array, takes hold of the beautiful summits and from thence looks over the abode of the Âryas with a beneficent eye.'

In the first passage, it is true, the name of Mithra

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[1] The mountain Alborz, south of the Caspian, but supposed to surround the whole earth.

does not occur; but from the second passage where Mithra's name is mentioned, it is quite clear that under the name of the sun the same deity was intended. If we once begin to refine and attempt to reduce all the utterances of the Vedic and Avestic poets to strict logic, we can argue for ever. We could say, that Mithra could not be the sun, because the sun is said to come before him, as if the rays of the morning sun could not be called the forerunners of the sun. Such difficulties do not exist in a poet's mind. They are of our own making, and belong altogether to a later phase of thought. If we say that Mithra represents the sun, that he is a god of a solar character, and that his name originally meant the sun, we have said all that in our modern language we can say.

How to compare Vedic and Greek Gods.

We must, however, once more ask the question what we can possibly mean when we compare a Vedic god with a Greek or Italian god.

When we say that the Vedic Dyaush pitâ, or the Proto-Aryan Dyeus patêr, is the same god as the Greek Ζεὺς πατήρ, we do not mean that he migrated as Wodan was supposed to have done, from the Caucasus to Germany, and that when he had settled in Germany he assumed the warlike character of the Eddic Týr. All that is meant, and all that can be meant, is that when the sky in some of its aspects had been conceived as an agent and called Dyaus or Dyeus, that name with thousands of other names was carried along by the Aryan speakers in their migrations from South to North, or from East to West. It formed part of their common Aryan heir-

loom, quite as much as the numerals from one to ten, or the names for father, mother, brother, and all the rest. The concept of this agent of the sky was modified of course according to the various aspects which the sky presented to the thoughts of men in Persia, Greece, Italy, and Germany.

Many things might be told of this Dyaus, according to the ever-varying character of those who invoked and worshipped him, till hardly anything remained of his original conception. Still, though in one sense it may be truly said that the Eddic Týr is no longer the same god as the Vedic Dyaus, the name is like a telegraphic wire that connects the message as delivered in India in Sanskrit, with the message as delivered in Iceland in Old Norse.

The transition from deva, bright, to deva, divine, may seem to us difficult to understand, but to the people in India the growth of heavenly brightness into celestial majesty was almost inevitable.

If this Dyaus (sky) was called deva, deva, it should be remembered, was only an adjective derived from the same root that yielded Dyaus, gen. divas. It meant therefore, originally, no more than what the name Dyaus meant, bright with the brightness of the sky.

The brilliant Haritas.

If the Haritas, the horses of the morning, were called devas or devîs, the etymological meaning of deva, bright, is still clearly perceptible, but it gradually fades away and assumes a more general meaning, a meaning which is constantly modified by the various objects of which it is predicated. If deva as applied to the Haritas means still brilliant, if applied to the seven sisters it begins to mean

something more and something less, and we cannot help translating it in the end by goddess or by divine. In Greek Charis has become a goddess, a devî, θεά, the daughter of the two principal deities, Zeus and Hêre, and there is nothing left, either in the name of Charis or in that of θεά, to remind us of the physical brilliancy of the apparition to which she owed her origin. The same apparition was interpreted in different ways in India and in Greece, though the old name was retained. But even if the name had been different, no one acquainted with the growth of mythological thought and language would hesitate for one moment to recognise in the Haritas, the rays of the morning, the red horses of Indra, as well as in Aphrodîte or Aphrogeneia, rising from the waves of the sea, Ἀναδυομένη, one of the many names of the cloud-born Dawn [1]. And what was more natural than that these apparitions should be called, not only deva, bright, but also agara, never ageing, considering that all brightness came from them, and that they were always the same, never changing, never dying.

Agni, Fire, Light, Sun.

Agni, fire, though quenched, could never be altogether destroyed. Agni might hide for a time in the waters or in the clouds, but men were always able to make him return either by rubbing sparks of fire out of two pieces of dry wood (hence he was called the son of strength, sahasah putra, will-fire, or dvimâtri, διμήτωρ, bimatris, having two mothers, the two fire-sticks), or by carefully guarding, tending, or worshipping him when hidden in the ashes

[1] Science of Language, ii, p. 474.

on the family hearth, hence called the (vispati) lord and friend of the house. When every morning the light appeared again as the morning sun from out of the sea, or from between his parents, heaven and earth, it was greeted as Agni, and was likewise called the son of strength, as if he had been produced by the same rubbing in the sky by which he was produced on earth, the son of the waters, or the son of heaven and earth. As the kindling of the fire on the hearth or the house-altar coincided with the rising of the sun, it was fondly imagined by the Vedic poets that the return of light was actually caused by the pious acts and prayers of the priests, while in other places (Rig-veda III, 7, 7) Agni, as the immortal god, is said to instigate the earthly sacrifices. It was only a new application of the old post hoc propter hoc argument. With every new phenomenon in which the presence of Agni was perceived or suspected, he became more and more polyonymous, and frequently mixed up with other gods on whose province he was constantly encroaching.

Indra.

Like Agni, Indra, also, was not restricted to one single manifestation in nature. He was conceived as bright (deva), as the enemy of darkness, as always returning when his aid was wanted, as ever young, ever strong, ever living. His starting-point, however, if we derive his name indra from the same root as ind-u, raindrop, was the rain of which he was supposed to be the agent, whether as giver or deliverer, being at the same time the giver of health and life, the conqueror of the dark clouds, the vigorous fighter, the restorer of light, the ever-victorious hero.

Ushas.

This character of perpetual youth, of ever-returning life, is strongly marked in Ushas, the Dawn. Though she seems to die every day as soon as the sun is born, she appears again and again, a new dawn, yet always the same, young, bright and everlasting.

Devas not restricted to one single Phenomenon.

What we must guard against is imagining that these gods of nature were restricted to one single phenomenon, even to that which may be supposed to have given birth to them. Agni was not simply the actual fire deified, he was never restricted to the hearth or to the sun. He was from the very beginning something over and above these phenomenal manifestations, a power that might manifest itself again and again wherever there was an opportunity, whether in the sky, or in the sun, or even in the moon; a something never to be grasped all at once, an agent apart from his acts. It was the same with Sûrya, the sun, with Parganya, the cloud, with Varuna, the sky, but it was more particularly so in the case of Indra, who being the most powerful of the Devas was capable of almost anything, from the killing of a dark demon to the creation and governing of the world. We must carefully keep this in mind, if we wish to enter fully into the thoughts of the Vedic poets. If, in saying that Agni (fire) created heaven and earth, the Vedic poets had thought of the fire on the hearth only, their words would seem quite unintelligible. But if they had recognised in Agni an omnipotent char-

acter, manifested in the fire, but in many other brilliant phenomena also, there would be nothing absurd in their ascribing to him the supporting of heaven and earth, nay the bringing forth of the sun (Rig-veda V, 6, 4) and the giving life to plants, to animals, and to men.

It is by ignoring this vast background of most of the Vedic gods that their character has been so much misunderstood by modern scholars, in spite of the warning addressed to them by native interpreters, more particularly by Yâska.

Asvinau.

The twin-gods, the Asvinau for instance, have been identified with the morning and evening stars, but it has never been proved that even their first beginning lies with these stars or these two apparitions of one star. Simple stars do not seem to have been theogonic with the Vedic Indians, and stars so completely separated as the morning and evening stars would not easily have been transformed into a couple of inseparable twins, unless we suppose that their identity was known to the astronomers of that early time. But even supposing that these stars had served as a first impulse, the Asvins covered a far larger area of ancient thought. They were, as I tried to show long ago, in my Science of Language (vol. ii, p. 608), correlative deities representing morning and evening, light and darkness in their never-ceasing return.

Yâska.

Yâska fully understood their character when he said that the one represents the overcoming of

darkness by light, the other the overcoming of light by darkness. This seemed to us formerly too abstract a definition for such dramatic gods, and yet it contained much of truth. But Yâska knew of other interpretations also.

Others, he adds, had explained the Asvins as heaven and earth, as day and night, as sun and moon, nay even as two virtuous kings. All this, with the exception of the last explanation, is perfectly right, if only we bear in mind that the background of the Vedic gods is always vast and vague, and that the same deity may be recognised in the sky, in the day, in the sun, nay even in the morning star, and on the other side, in the earth, the night, the moon and the evening star. The idea that the two Asvins were two virtuous kings, or two horsemen, is clearly a secondary development. I doubt even whether their name had originally anything to do with their riding on horseback, and I should much prefer to derive it as a metronymic from asvâ, the mare, the recognised name of their mother, the dawn, or the morning sun (fem.). At all events the two Asvins must not be narrowed down to two stars, the morning and evening stars, unless these stars are taken as symbols only of all that is meant by morning and evening.

Varuna, and the Moon.

It would be a still more serious mistake if, as Oldenberg seems to propose, we were to reduce Varuna to a mere representative of the moon. The moon belongs certainly to the domain of Varuna, the dark over-arching sky, but to say that the moon was originally Varuna or Varuna the moon, would

be an insult to the poets who celebrated that majestic deity as having fashioned heaven and earth, as embracing the three worlds, as having opened boundless paths for the sun, nay, as having caused the golden sun to shine.

The True Theogony.

Nowhere better than in the hymns of the Veda can we see how, without any great effort on the part of the early speakers and thinkers, a class of beings came thus to be called into existence, all called bright (deva) and immortal (amṛita), all famous for performing valiant deeds which no one else, certainly no mortal, could ever have performed. Here we can see the true theogony, not only of India, but of the whole Aryan world. Nature led up to nature's gods, and what we call the forces of nature, or the manifestations of rational or divine powers in nature, became, almost by necessity, the first members of the Aryan Pantheon, whether on the Himâlaya or on Mount Olympus.

Interference among the Gods.

But the ancient observers of nature were not satisfied with the names of single gods, as representatives of certain phenomena of nature. As many of these phenomena took place at the same time, and as they often interfered with one another and influenced one another, such as the sun and the moon, the rain and the earth, the night and the dawn, the lightning and the clouds, those who were at all interested in the events which took place before their eyes every day, every month or year, could not help telling of certain acts, whether of love or of hatred, performed by the actors engaged

in the drama of nature. We may seem to ourselves much more philosophical, when we speak of the power of gravitation, or of forces, luminous, caloric, magnetic, or electrical, as if we knew what a force means. The ancients, when they saw the effect of such powers on themselves or upon each other, had to ascribe them all to a will, nor could they conceive of any will except as that of an agent, or a person. The persons, therefore, who represented certain beneficial or noxious acts, would naturally assume a corresponding character, and as most of the acts ascribed to them, such as thunder and lightning, the giving of light and warmth and fertility, or the destruction of the darkness of the night or of a storm-cloud, were far beyond the powers of ordinary mortals, the character of these agents would of necessity become more and more exalted, superhuman, or supernatural; while the constant recurrence of their manifestations would secure to them the name of everlasting, never ageing, or immortal beings. However human they might seem to be in some of their mutual relations, in their respective powers and performances, they were all superhuman, supernatural, and in the end divine, originally deva, or bright. Even the most thoughtless person would have felt that his well-being, nay his very life depended on the light of the sun, the rain of the sky, or the refreshing breezes of the wind, while his home and his family were constantly at the mercy of the scorching sun, of lightning, fire, and water.

Human Feeling of Dependence.

Need we wonder then that a feeling of dependence also sprang up at a very early time, not simply with

regard to thunder, lightning, or rain, but likewise with reference to those agents who had been recognised as causing these phenomena, hidden, yet manifested, both in their regular activity and in the irregular convulsions of nature. In this way we can see how what we call mythology, even in its religious aspect, so far from being irrational, was originally the most rational view of the world, was in fact the only possible philosophy, though clothed as yet in very helpless language. Let us only remember that most of these manifestations were luminous and constantly recurring, and we shall easily understand the origin of the Devas (bright ones), of the Amritas (the immortals), who were believed to be able to confer benefits or to cause injuries to men, who acted either in union or opposed to each other, and who, if they acted at all like human beings, were supposed to be influenced by kind words (hymns of praise), or by liberal gifts (sacrifices); who would be, in fact, and do exactly what we find the Vedic Devas to be and to do.

Polytheistic Family-organisation.

In the Greek pantheon we see a further advance. Here the different gods have been formed into a family, they are married promiscuously, yet not quite so promiscuously as in the Veda, they have sons and daughters. Sisters and brothers are either friendly or they are jealous, opposing each other, or combining against their parents. As there was a head of a family and a supreme ruler in ancient families and in the ancient states of Greece, we find in the Olympian pantheon also a recognised head, and a king of gods and men, whom not only men,

but the gods themselves had to obey. It has been said that such an organisation is entirely absent in the Veda; but the first germs of it seem to me clearly discernible. Heaven and earth are in the Veda also husband and wife, the dawn or Ushas is the daughter of the sky, the storm-winds, or Maruts, or Rudras, are his sons. Day and night (the Asvins) are brothers or twins, sometimes called the sons of the Dawn or of the night[1], sometimes represented as the lovers of Sûryâ, that is, of the sun, conceived as feminine and called the daughter of Sûryă, the sun, conceived as a masculine. Sun and moon, which have supplied the theme of so many love stories in other mythologies, are much less prolific in their legendary growth in the Veda, for the simple reason, I believe, that the moon as well as the sun remained in Sanskrit a masculine long after the close of the mythological period.

Henotheism.

It is necessary if we want to enter into the true spirit of Vedic mythology and religion, to wean our minds from certain preconceived opinions chiefly derived from the mythologies and religions of other nations. Because certain Devas of the Veda have the same name as the gods of other Aryan nations, it has naturally been supposed that they are of the same flesh and blood as the θεοί of the Greeks, the Dii or Dîvi of the Romans, the Tívar in Old Norse. In a certain sense, no doubt, this is true. They were all conceived originally as the agents behind the great drama of nature, they were all, at least in the beginning, physical gods. As these phenomena

[1] Yâska XII, 2.

were many, the gods also were many, and it seemed most natural to comprehend this stage of mythological and religious thought under the familiar name of polytheism. But we must learn to distinguish between different kinds of polytheism. The Greek religion, as we know it, may fairly be called polytheistic, for it not only recognises the coexistence of numerous gods, but has reduced them to a certain system, with Zeus at their head, his children more or less on the same level among themselves, and all the rest as subject to him, reflecting, in fact, the patriarchal family system of ancient Greece. It was not so in the Vedic age.

Henotheism and Polytheism.

The Vedic hymns enable us to go, as it were, behind this well-organised polytheism, and to watch the growth of single gods, each standing by himself before the mind of the worshipper, each receiving for the time being those superlative attributes which belong to a Deva, when free from the limiting presence of other Devas. Such a stage was not only perfectly natural, it was really inevitable during a period when families lived by themselves in hamlets rather than in villages, when they met on rare occasions only, when anything like social life or political intercourse was as yet unthought of, when therefore each god was supreme to his own poet and his own worshippers, and to the small family or clan that might be growing up in their settlement. Such a state of religious thought did not exclude the possibility of other neighbouring gods, it did not even ignore the fact of their existence; only these neighbouring gods had to stand

aside for a time and were not allowed to limit in any way the power and influence of the local god who, however insignificant he might seem to others, was to his own people and his own worshippers their real god, their old god, and, for a time, their only god. This very important and characteristic stage in the early growth of religion, so well known to all who have studied the Veda[1], should be carefully distinguished from Polytheism on one side, and Monotheism on the other. In order to have a name for it, I proposed to call it Kathenotheism, or by a shorter name, Henotheism. If a better name can be found, I do not object, as long as the facts implied by it are fully recognised. We might really have postulated such a stage a priori, as a necessary stage in the development of mythological religion, but it shows once more the great importance of the Veda that it should have preserved for us the clear traces of such a phase in the actual history of religious thought; it shows the superiority of a history of religion, if properly understood, to all attempted philosophies of religion. The best proof of the reality of this stage of religious thought, which I designated as Henotheism, is its having been recognised at once in other religions. What Maspero describes as a characteristic phase of the ancient Egyptian religion, what is it but what is called Henotheism in the Veda? 'Each of the feudal gods,' he writes (Dawn of Civilisation, p. 101), 'naturally cherished pretensions to universal dominion, and proclaimed himself the suzerain, the father of all

[1] Muir, Original Sanskrit Texts, v, pp. 6, 7. On the same kind of Henotheism in the Mahâbhârata, see Dahlmann, pp. 237–241.

the gods, as the local prince was the suzerain, the father of all men; but the effective suzerainty of god or prince really ended when that of his peers ruling over the adjacent nomes began.' If we once perceive clearly the true character of Henotheism, not as forgetfulness of all other gods, arising from an enthusiastic devotion to one, but as devotion to one single god, without any thought as yet of any possible rivals, we shall see how it removes what seemed to be glaring contradictions in the religion of the Veda itself. Of course we have no right to expect a complete system in the hymns of the Rig-veda. Still even thus it was startling to see nearly every one of the great Vedic gods addressed in various hymns as supreme, as independent, or at all events as greater than any other being, whether human or divine.

Solar and Meteorological Interpretation.

But after some of the apparent contradictions in the thoughts of the Vedic poets had thus been rendered intelligible, there remained others equally puzzling, which for a long time divided the interpreters of the Veda into two classes, or, as some people would have it, into two camps. The two subjects of permanent interest to the Vedic poets were (1) the sunrise, the daily triumph of light over darkness, and the annual triumph of spring over winter, and (2) the thunderstorm, or the triumph of a bright god over the dark clouds and the rescue of fertilising rain from the prison in which it seemed to be held during the season of heat and drought. The chief actor in the first drama was Agni, as the light in the sun, in the second Indra as the

champion of the blue sky. Other gods assisted in these battles, but the chief part devolved on the god of light (Agni), and the god of rain (Indra). We should have expected the sun, under its various names of Sûrya, Savit*ri*, Âditya, &c., to have been the prominent deities in the first battle, and Dyaus, the sky, in the second. But though these gods occur occasionally as conquering the darkness of the night, or breaking the dark prison of the rain, Agni and Indra have superseded them in the minds of most of the Vedic *Ri*shis.

These two battles, which form the staple of Vedic poetry, are often so mixed up together, the imagery used is often so much alike, that it is difficult to say which was present to the mind of the poet, and what was the name of the solar and luminous hero that fought the battle. Hence two schools of interpretation arose, the Solar and the Meteorological, which tried to interpret, not only the hymns of the Rig-veda, but many of the episodes in other Aryan mythologies also, by seeing in them poetical metamorphoses either of the sunrise or the rising of a thunderstorm. I have always considered the solar and vernal phraseology as the more important and as the more primitive in the growth of mythology, because the solar and vernal myths, in their widest meaning, comprehended all the phenomena which are regular and recurrent, and therefore more likely to produce a lasting impression on the human mind. This view has been fully adopted even by those who are sedulously represented as opposed to the interpretation of mythology by means of Vedic poetry. Thus Dr. Tylor says (Prim. Cult. i, p. 302 ; ii, p. 251) :—

'Day is swallowed up by night to be set free again at dawn, and from time to time suffers a like but shorter durance in the maw of the eclipse and the storm-cloud. Summer is overcome and prisoned by dark winter, to be again set free. It is a plausible opinion that such scenes from the great nature-drama of the conflict of light and darkness are, generally speaking, the simple facts which in many ages and lands have been told in mythic shape as legends of a hero or maiden drowned by a monster.'

Dr. Mehlis in his Grundidee des Hermes, p. 75, has arrived at the same conclusion, and has expressed his reasons very clearly :—

'If the immortality of the gods constitutes the chief difference between them and men, this conception, coupled with the name of the Devas in Sanskrit, i.e. "the bright ones," cannot possibly be derived from momentary and sporadic phenomena, or from gods who produced such phenomena as storms, showers of rain, lightning and thunder. So characteristic a name as deva, bright and divine, can have its source in consistent and regularly returning luminous phenomena only, personified as eternal and immortal. . . . The idea of the Eudaimonia of the gods could hardly have sprung from personified meteoric phenomena, but very well from the constant light and life-giving power of the sun, which produces terror as an exception only.

'Another argument in favour of the solar theory is the monotheistic conception of the all-pervading power of Dyaus, as the bright sky, the first step, which led on to Dyaush-pitar, the Heaven-father of the Vedas, who, like Zeus, directs all between heaven and earth, who sends rain and lightning, clouds and sunshine. . . .

'We hold fast, therefore, to the conviction that the Aryans received the first impulse to a conception and a worship of gods (Devas) from the beneficent

daily apparitions of light and day, and that the meteoric view is a secondary one both in time and in thought.'

I believe that Prof. Kuhn also arrived at the same conclusion, though he always allowed a larger field to meteoric than to solar myths [1].

Other Vedic scholars also have come to see that the cause of the disagreement between Prof. Kuhn and myself was really to be found in the Vedic poets themselves. With them Indra fighting the dark thunder-cloud was a god of light as much as Agni conquering the darkness of the night. If the rain rescued from the cloud by the bright lightning was called the milk given by cows, the bright days also coming out one by one from the dark stable of the night, were spoken of as red cows, so that the booty of Indra and Agni seemed to be the same, at least in name. If Agni as the risen sun restored light and life to the world, Indra too, after having torn the black demon of the cloud to pieces, might be praised as the harbinger of light and the lord of the blue and bright sky. It took some time before all this was clearly perceived, and the ambiguity inherent in Vedic poetry fully understood. At present no scholar hesitates to admit what M. Senart has so well expressed when he writes (Lég. du Buddha, p. 214) :—

'La lutte de la lumière contre l'obscurité s'étend à la lutte du matin contre l'orage, et le lien qui par là rapproche le héros solaire et Agni se manifeste avec évidence.'

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[1] Kuhn, Herabkunft des Feuers, 1859, pp. 55, 77, 251. M. M., Science of Language, 1863, p. 641.

And again (p. 283) :—

'Il importe peu qu'on le considère dans ce cas comme expression du soleil ou comme représentant de la foudre.'

Once more, on p. 321, M. Senart says :—

'Par leur signification primitive, ces traits divers, emprisonnement, exposition, exil parmi les bergers et les troupeaux, s'appliquent aussi bien au héros solaire qu'au représentant du feu du ciel [1].'

Dual Deities.

In all cases where two deities thus seem to run together, the Vedic poets were in the habit of coupling their names and speaking of them in the dual. Indra and Agni, therefore, being perceived to perform the same or very similar deeds, were invoked very frequently in the dual as Indra + Agnî. There are eleven hymns in the Rig-veda addressed to this compound deity of Indrâgnî, in which they are both praised as having killed V*ri*tra; as carrying the thunderbolt in their hands, as conquering the strongholds of the demons, as adorning the bright heavens, as having the same father, as being brothers, nay, twins.

Soma, originally the rain, the favourite beverage of Indra, is, though rarely, mentioned in these hymns as offered sacrificially to Agni also. And in the same manner the Maruts, who in their character of storm-gods are the natural allies of Indra, are in certain hymns introduced as the helpers of Agni [2].

We see, therefore, that the common nature of

[1] See also l. c., p. 326.

[2] See Macdonell in an essay of his, 'On the god Trita,' published in the Journal of the R. A. S., 1893, p. 419.

Agni and Indra and of similar divine couples was discovered by the Vedic poets themselves, and we can understand, what they perhaps were hardly aware of, that this phase of religious thought was the natural result of Henotheism. If one god, whether Agni or Indra or Soma, had once been raised to the rank of an only god, all the great phenomena of nature, even those which were originally outside his special physical sphere, had to be accepted as more or less his actions; or, if they had by neighbouring poets been ascribed to another god, as performed by him in union with that divine agent.

Syncretism and Allelotheism.

It has been the custom to ascribe this fusing of different deities, or this substituting of one deity for another, to the very latest period of Vedic thought, and to speak of it as modern Syncretism. But there is nothing to prove that the formation of these compound names of deities was always of late origin. Anyhow, parallel cases occur even in the Avesta, and they have a recognised position in the Vedic ceremonial.

This so-called Syncretism seems to me to admit of a far better explanation, if we try to understand it as the natural result of the previous stage of Henotheism. I should therefore propose to call it by a name which would suffice to keep it distinct from the later Syncretism, and would not commit us to any far-reaching theory, namely, Allelotheism. When we are told by the Vedic poets (Rv. II, 1) that Agni is Indra and Varu*n*a, and Mitra, we must not forget that the same poets are fond of saying that all

the gods are Agni. This means that Agni having with his own worshippers, or at certain sacrifices, become the one god on whom all the broad features of ancient godhead had been concentrated, it was but natural that all the most marvellous workings of nature should be ascribed to him, even those that seemed very distant from his original sphere of action. If Agni is said to be Mitra or Varuṇa, we must remember that Agni never was simply ignis, the fire, or the fire in the house. He was light, and wherever light and warmth were present, there was Agni. Thus when Agni is said to be in the sun, this was not a later transference, but it was true from the beginning. Whatever there was of light and warmth in the sun was the same thing as the light and warmth of the fire in the house. What else could it be to a primitive worshipper? Even the bright flash of lightning would at once be recognised as a momentary manifestation of the same Agni. Mitra, as a matutinal deity, was therefore readily identified with Agni, and though Agni's identification with Varuṇa, as a nocturnal deity, seems more difficult, yet we must remember how often the dark deities are conceived as the predecessors, nay, even as the progenitors, of the bright powers of the morning, so that even in the darkness of the night, as in Varuṇa, the germs of the coming light might be said to lie hidden. Varuṇa could even be identified with the sun, because during the night also the agent of the sun was felt to be present, though invisible to human eyes.

From this point of view many passages in the Veda become intelligible, as when we read (V, 85, 5) that Varuṇa standing in the sky measured or made

the earth with the sun as with a measuring-rod, mấnena iva tasthivấn antárikshe ví yáh mamé prithivîm sűryena.

Anthropomorphic Development.

Another important feature, which shows how far the Greek gods have advanced beyond their Vedic relatives, is the pronounced human form of the Greek gods. They are not only superhuman in their strength, but they are at the same time the very perfection of the human type in their visible appearance. Here again we find the germs only in the Veda, far removed as yet from the perfection of Greek mythology. We meet in the Veda with descriptions of Ushas, for instance, as a lovely maiden, of Agni as golden-bearded, of Indra as distinguished by his handsome nose and shining helmet. But the creation of a Zeus or Athêne by Phidias, of a Hermes by Praxiteles, of an Artemis or an Aphrodîte, like those seen in the Louvre, was beyond the Vedic horizon. The Greeks, on the contrary, seem to have reasoned boldly that if the gods are superhuman in power, they must also be superhuman in beauty; and yet they hardly ever overstepped the limits of real beauty, they never, or hardly ever, sacrificed reality to mere symbolism, like the Hindus, Egyptians, and South Sea Islanders.

That besides physical beauty the gods should also be endowed with all ethical excellences, was no doubt a postulate of the Greek mind, but its realisation was hampered by hereditary influences, that is, by the physical prototypes from which the conceptions of nearly all the Greek gods had started,

and which could never be altogether obliterated. The Greeks might postulate a Zeus as 'the greatest and best,' the physical antecedents of this deity were such that they always dragged him down to a lower level. It was, however, this postulate of a Zeus μέγιστος ἄριστος, whoever he might be (ὅστις ποτ' ἐστίν, Aesch. Agam. v. 160), which, like that of Jehovah in the minds of the prophets, led in time to the idea of the one God above all gods, and in the end to the still higher idea of θεός, or God.

Can this a priori view of the Evolution of Mythology be verified?

The process which has been described so far may, no doubt, on some points seem mere theory. I fully admit that it is an a priori view of the origin and growth of mythology, or of what is now called the evolution of mythology, and indirectly of religion. The great question then that remains to be answered by students of Comparative Mythology is, whether this a priori view can be verified by a posteriori facts, taken chiefly from Greek and Vedic mythology. This is really the problem to the solution of which my own researches in mythology have been chiefly directed. Though I believe that the theory of mythology, as explained above, has found more general favour with scholars and philosophers than any other, yet history stands higher than any theory, and it is by historical facts only, by an examination of real mythologies, that it can be either confirmed or refuted.

Definition of Mythology not Exhaustive.

One objection, however, may be raised at once, that the mythological process as described above

does not exhaust the whole of mythology, and that there are some gods and goddesses for which it seems impossible to claim a physical origin.

Ancestral Spirits.

There is the belief in ancestral spirits, which has been traced in many parts of the world, not only among uncivilised, but likewise among civilised races. The extraordinary assertion that the worship of ancestral spirits was unknown in the ancient religion of India has not been repeated of late, and may therefore be supposed to have been silently surrendered by Mr. Herbert Spencer[1]. The worship of the Pitris (Fathers) in India[2], like that of the Ka in Egypt and of the Fravashis in Persia, constitutes, on the contrary, one of the most vital portions of the religion of those countries from the earliest to the latest times. This ancestor-worship, however, may be far better treated as a subject by itself. It is from the very beginning religious rather than mythological in its character, and even in cases where it has been mixed up with extraneous superstitions and become mythological, it should be left to stand by itself, and not be made a part of ordinary mythology.

Abstract Deities.

There is another class of so-called gods and goddesses which, according to the theory of mythology

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[1] See M. M., Anthropological Religion, p. 142.

[2] If more evidence was wanted, it might easily be found in Mr. J. M. Campbell's recent articles on Religion (Ind. Antiquary, Nov., 1894, p. 333). He shows how necessary it is to distinguish between different kinds of spirit-worship, for while ancestor-worship is one of the most widely-spread forms of faith among high-class Hindus, demon-worship is actually abhorred by them.

explained above, would stand excluded, I mean the abstract deities, such as Psyche, soul, Eros, love, Eirênе, peace, and many more. In the folklore of the lower classes at Rome similar beings were very numerous. Some of them are classed with the Manes[1], such as Vitumnus, he who gives life to children; Sentinus, he who gives them their senses; Vagitanus, he who was thanked for helping children to cry; or Cuba, Cunina, and Rumina, who were supposed to help children to lie down, to sleep in their cots, and to take the breast[2]. Even in the Veda we find already hymns addressed to Vâk, Speech, Śraddhâ, Faith, Lakshmî, Happiness, while in the Greek pantheon we meet with Themis, the old goddess of justice, with Aisa and Moira, fate, Hypnos, sleep, and many more.

Epithet Deities.

Here, however, we must make a distinction. Some of these so-called abstract deities owe their origin to what were originally epithets of real mythological gods. Thus Dius Fidius as well as Sancus was originally a name of Jupiter, but assumed in time so much independence that its very relation to Jupiter was forgotten. Lucina was like Lucetia and Luceria a name of Juno, but she became a new

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[1] In Egypt also we have such gods as Maskhonît who appeared at the child's cradle, Raninît who presided over the naming and nurture of the newly born. See Maspero, Dawn of Civilisation, p. 82.

[2] Hisce Manibus lacte fiat, non vino, Cuninae propter cunas, Ruminae propter rumam, id est prisco vocabulo mammam, a quo subrumi etiam nunc dicuntur agni. Varro apud Nonium, p. 167.

goddess very much like the Greek Eileithyia, originally, particularly in Argolis and Attica, a name of Hêre, though frequently invoked as an independent goddess assisting at the birth of children. Matuta also was at first a name of Juno, the Mater Matuta, and Lucretius (v, 655), as is well known, uses her name, whether rightly or wrongly, as a name of the Dawn.

Substantive Deities.

In other cases, however, a new abstract deity seems to have been created independently. In Greek, Themis, Justice, must be of so early a date that Hesiod was able to represent her as the second wife of Zeus, the first being Mêtis, or wisdom, not yet Hêre. She is referred to the oldest race of the gods, as the daughter of Ouranos and Gaia. When she is called *πανδερκής*, or all-seeing, and in later times the daughter of Hêlios, one feels inclined to suspect for her also a physical substratum, but there is no definite trace of this left either in Homer or in Hesiod. On the whole, I think that Kuhn was right when he laid it down as a general rule that it is very risky[1] to ascribe any mythic personalities sprung from pure abstraction to the oldest period of mythology.

Though we have to admit, therefore, that, from a purely logical point of view, the definition of mythology, as explained before, is deficient, because it excludes all non-physical deities, this defect is really less serious than it would seem to be. However ancient the Greek Themis may be, she clearly belongs to a different stratum from that which gave

[1] Herabkunft des Feuers, p. 17.

rise to her supposed parents, Ouranos and Gaia, Heaven and Earth, to Zeus, Sky, to Hêlios, Sun, Selêne, Moon, Êos, Dawn, and all the rest. From a psychological point of view she always remains an abstraction, not an intuition; an abstraction which no doubt assumed flesh and blood in the imagination of Greek poets, possibly by being grafted on a more ancient conception which is lost to us; but she can never claim perfect equality with the mythological creations of the earliest Aryan times. We hold, therefore, though, as yet, on a priori grounds only, that the earliest objects of mythological thought and language were the most prominent phenomena of nature, the sky, the sun, morning and evening, day and night, the wind, thunder and lightning, the moon, the dawn, some of the stars, the rivers, the mountains, the clouds, the rain, the earth, the fire, the water, and in some cases the sea, and all of them conceived not as inanimate objects, but as animate and as doing something, as agents, in their thoughts and passions like human agents, but in other respects as superhuman, immortal, and lastly as divine[1].

Different Interpretations. Euhemerism.

No school of mythology, however sceptical as to the physical origin of the principal gods and heroes of antiquity, has ever, so far as I know, suggested any other intelligible origin, I mean intelligible on a priori grounds. Nor should it be considered of

[1] This view is fully accepted by Oldenberg, Religion des Veda, pp. 48 seq., 52 seq., 591 seq., however much he may seem to differ from Kuhn and myself on other points.

small moment that in the case of the two most ancient mythologies and religions of the world, that of Egypt and Chaldaea, the most competent scholars have arrived at exactly the same conclusion. Maspero, in his Dawn of Civilisation, after having shown the true character of the gods of Egypt (p. 85), repeats, when summing up his view of the gods of Chaldaea (p. 639) :—

'Whether Sumerian or Semitic, the gods, like those of Egypt, were not abstract personages, guiding in a metaphysical fashion the forces of nature. Each of them contained in himself one of the principal elements of which our universe is composed,—earth, water, sky, sun, moon, and the stars which moved around the terrestrial mountain. The succession of natural phenomena with them was not the result of unalterable laws ; it was due entirely to a series of voluntary acts, accomplished by beings of different grades of intelligence and power. Every part of the great whole is represented by a god, a god who is a man, a Chaldaean,' &c.

Surely these ancient savages of Mesopotamia and Egypt have as much right to be consulted as the modern savages of Patagonia and New Guinea. But quite apart from all facts, if certain Euhemerists, whether ancient or modern, maintain that the gods were originally human beings, endowed with great physical or intellectual strength, who had been raised to the rank of deities, do they not forget that what has to be explained is the origin of this very concept of divine beings, of a class of bright Devas to which human beings, whether living or dead, could afterwards have been assigned ? No one surely could be deified, could be raised to the rank of Deva, before the concept of Devas had been

fully elaborated. No apotheosis is possible unless there is the concept of theos ready at hand. It is curious that this simple fact seems never to have struck our modern Euhemerists, those at least among them who possessed some knowledge of psychology. Or if others imagine that mythology can easily be explained by supposing that men agreed to ascribe a soul to the sky, or the hills, or the trees (Animism), do they not forget that this concept of soul also can only be the result of a long process of thought, and, when once clearly elaborated, would be the very last thing which men, believing in a soul, would ascribe to wood or stone or vapour?

Appeal to History.

Still our last appeal must always be to history, and to history we now must go. Of course of many of the ancient mythologies or religions of the world we know nothing. Many have sprung up and have vanished, of others we have vague reports only, while the number of those which have left us ancient poems or sacred books, in fact any materials to study the historical evolution of mythology, is extremely small.

Solarism everywhere.

It is curious to observe that as soon as the study of ancient religions and mythologies was taken up by European scholars, and long before the rise of Comparative Mythology or Comparative Theology, it seems to have been taken for granted that sun-worship had been the earliest and most widely diffused form of pagan religion. This conviction could not have been derived from the study of the Sacred Books of the East, most of which have become

accessible and more or less intelligible in our century only. It was from the accounts of classical writers, such as Herodotus and Plato, and in later times from the reports sent home by missionaries, travellers, and merchants, such as Carpini, Marco Polo (d. 1324), Sagard, Dobrizhoffer (d. 1791), and many more, that students who tried to gain an insight into the origin of mythology and religion derived their conviction that their principal source was solar, sun and sky being often taken as one. Herodotus (i, 131), when describing the religion of the ancient Persians, had stated that they worshipped the sky as Zeus, and sacrificed besides to the Sun, the Moon, the Earth, Fire, Water, and the Winds. We know from their sacred books that the supreme deity of the Persians had indeed been originally a representative of the sky (the Asura Varu*n*a of the Veda, the Ahura mazdâo of the Avesta), though raised high above the level of the other gods of nature, by his early assumption of a spiritual and ethical character.

Herodotus (iv, 188) had likewise to serve as the authority for the belief that the Libyans sacrificed to the Sun and Moon only, while those about Trîtonis worshipped chiefly Athêne, and after her Trîton and Poseidon. The last sentence probably refers to Greek settlers in that neighbourhood.

Prodikos of Keos[1] declared that the ancients believed sun and moon, rivers, springs, and all that was useful to life to be gods. Epicharmos took the same view and expressed his conviction that the gods

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[1] Πρόδικος ὁ Κεῖος ἥλιόν φησι, καὶ σελήνην καὶ ποταμοὺς καὶ κρήνας καὶ καθόλου πάντα τὰ ὠφελοῦντα τὸν βίον ἡμῶν οἱ παλαιοὶ θεοὺς ἐνόμισαν (Sext. Emp. adv. Phys. i, 10, 52).

were the winds, water, the earth, the sun, fire and the stars[1]. Plato in the Apologia (26) introduces Sokrates as professing his belief in the godhead of sun and moon. In the Laws (821) he calls sun and moon the great gods, though in the Timaios (40) he refers to the earth as the first and oldest of the gods in the interior of heaven. The most important passage, however, is that in the Kratylos (397)[2], where he expresses his belief that the aboriginal Hellenes looked upon sun, moon, earth, stars, and heaven as their gods, and adds that these are still the gods of many of the barbarians. Who his barbarians are, he does not say, but the name of Plato was quite sufficient to induce scholars during the middle ages, and even after the revival of learning, to repeat his statements, and to declare that the gods believed in by the ancients, whether Greeks or barbarians, had been sun and moon and the principal phenomena of nature.

This belief in physical and, more particularly, solar gods and heroes found its most decided expression in a work published in 1686, the Coelum Poeticum of Scheffer, in which it is laid down as a recognised fact that[3] 'every god of the Gentiles is simply and solely the sun, conceived according to his diverse operations, as Jupiter working in the air, as Neptune in the water, as Pluto in the lower world.' We see therefore that solarism or a belief

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[1] Ὁ μὲν Ἐπίχαρμος τοὺς θεοὺς εἶναι λέγει
ἀνέμους, ὕδωρ, γῆν, ἥλιον, πῦρ, ἀστέρας.

[2] See above, p. 74.

[3] Omnis gentilium deus est solus sol, pro diversa operatione sua acceptus, v. g. ut in aura operans est Jupiter, ut in aqua Neptunus, ut in subterraneis Pluto et sic de aliis.

in the solar origin of the gods and heroes of pagan religions has very ancient and very high authority, and that it was certainly not discovered by the students of Comparative Mythology and Theology, who, on the contrary, were the first to prove it untenable.

The Mythology of Savage Races.

The chief objections to this explanation of the heathen pantheon came from philosophers who pointed out that the worship of the sun under his various names required already a considerable amount of abstract thought, and could not therefore be looked upon as the first step in religion and mythology. Fetishism, as found in West Africa, and totemism, as found in North America, were supposed to represent a ruder and, it was concluded, more primitive form of religious and mythological thought.

This view prevailed till the myths and customs of savage races began to be studied in good earnest; and till Bastholm (1740–1819)[1], one of the most learned and most conscientious ethnologists of the last century, protested against this conclusion, and, once for all, appealed to facts against theory. He pointed out that the Andaman islanders, who were then and are still considered as the lowest of the low, and therefore the nearest to rude and primitive mankind, worshipped nevertheless sun, moon, spirits of forests, water, mountains and storms.

Classical scholars, however, continued the most strenuous opponents of the Epicharmian view that

[1] Historische Nachrichten zur Kenntniss des Menschen in seinem wilden und rohen Zustande. Aus dem Dänischen übersetzt von H. E. Wolf. 1818.

the Greek gods were no more than the sun, the stars, the winds, water, and the earth. They might accept Hêlios as the sun and Selêne as the moon, but Zeus and Athêne, they said, were made of different stuff altogether, and required a different explanation. In some respects, no doubt, they were perfectly right; the question is whether Epicharmos himself did not take it for granted that every Greek was able to distinguish between the purely objective ball of the sun, and the agent that was represented by it.

Bastholm.

Bastholm, however, maintained his position, and this position, though at first smiled at, proved stronger than it was expected. Instead of attempting a solution of the question of the origin of mythology, and indirectly of religion by means of a priori arguments or by authority, he insisted that there is a large amount of evidence, besides that of Greece and Rome, which should be carefully studied before we attempt a solution of this problem. Thus while pointing out that sun-worship was not only possible but real on a very low stage of civilisation, such as that of the Andaman islanders, he showed at the same time (l. c., p. 169 seq.) that, on the other hand, it would be premature to say that sun-worship formed the necessary beginning of all religion and all mythology. From the accounts of travellers which he had carefully studied he was able to prove the existence of people who worship the moon without worshipping the sun, while there are but few, he adds, who worship the sun without worshipping the moon.

Thus the impulse was given to that ethnological study of religion and mythology which, owing to

the rapid increase of our acquaintance with uncivilised races, has proved so useful in the hands of conscientious students. But strange to say, while our modern ethnologists seem so opposed to the admission of solar gods and solar heroes, nearly all the evidence brought together from the most distant parts of the world by unprejudiced missionaries and travellers pointed straight in the opposite direction. Marco Polo, when speaking of the religion of the Tatars in general (ed. Yule, vol. i, p. 248), writes:—'This is the fashion of their religion. They say there is a Most High God of Heaven[1] whom they worship daily with thurible and incense, but they pray to him only for health of mind and body. But there is also another god of theirs called Natigai, and they say he is the god of the Earth.' When speaking of the Cathayans (whether Chinese or Tatars) he says (vol. i, p. 437): 'As we have said before, these people are idolaters, and as regards their gods, each has a tablet fixed high up on the wall on which is inscribed a name which represents the Most High and Heavenly God .... And below on the ground is a figure which they call Natigai, which is the god of things terrestrial. To him they give a wife and children[2].' Plano Carpini's account of the Tatar religion, as quoted by Yule (vol. i, p. 249), is much the same. 'They believe in one God,' he says, 'the Maker of all things visible and invisible, and the Distributer of good and evil in the world, but they worship him

[1] This Supreme Spirit is identified by Yule with the Tengri of the Mongols, also called Khormuzda, a word traced back by Schmidt to the Persian Hormuzd (Yule, vol. i, p. 240, note).

[2] See also Marco Polo, ed. Yule, vol. ii, p. 478.

not with prayers or praises or any kind of service. Natheless they have certain idols of felt, imitating the human face. These they place on either side of the door, and believe them to be the guardians of the flocks from whom they have the boons of milk and increase [1].'

Chinese authorities report that the Hiongnu (Huns), the oldest race of High Asia, worshipped the sun, the moon, the spirit of the sky, the earth, and their ancestors. Menander relates that the Tukius (Turks) showed great reverence for the fire, the air, the water, the earth, but that they worshipped besides a Supreme God, as the creator of the world, and sacrificed camels, oxen, and sheep to him. Castrén [2] tells us that the Tunguses of the present day turn with reverence to the sun, the moon, the stars, the earth, the fire, and the spirits of forests and mountains, but they also worship a Supreme Being under the name of Buga [3]. The Samoyedes have a very similar religion, but they call their Supreme God Num, and the same applies, according to Castrén, to the Fins also [4].

But additions to our knowledge came not only from travellers and missionaries among savage and

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[1] Col. Yule identifies the Natigai with the Ongot, the supreme spirit of the Tunguses. The Buriates use Nugait or Nogut or Ongotui (vol. i, p. 250). Castrén suspected some connection with the Sk. Nâtha or Nâthaka, lord. Nâtha is not only a name of Buddha, but of numerous local spirits whom the Buddhists in Burma called Nâts. See J. M. Campbell, Ind. Antiq., Nov., 1894, p. 337.

[2] Cf. Castrén, Ethnol. Vorles., p. 64.

[3] Probably the Persian Baga, the Russian Bog', god, Sk. Bhaga, one of the Âdityas.

[4] Castrén, Finnische Mythologie, p. 2 seq.

therefore supposed to be primitive races, but likewise from the decipherers of ancient inscriptions and explorers of ancient literatures, and always with the same result.

Egypt and Babylon.

As soon as the decipherers of the hieroglyphic inscriptions began to reveal the secrets of the Egyptian religion, it became clear that the ancient settlers in the valley of the Nile worshipped gods representing the sky, the earth, the stars, the sun [1], the Nile, and that the chief object of their worship was solar. Râ, their chief deity, was a name of the Sun. Osiris, the son of Seb (earth) and Nut (heaven) is again the sun, Iris is the dawn, Horus is the child of Osiris and Iris,—all solar deities [2].

The same applies to Babylon. There also the decipherers of the Babylonian tablets soon discovered that the Sun-god was the principal deity. It has been said that this solar religion may have been preceded there by something like Shamanism, emanating from the primitive Accadian population. It certainly *may*, but it should always be remembered that Shamanism is not a religion, and that there is a very wide difference between the religion and the cult of such races as are credited with Shamanism, whether Siberians, or Red Indians, or Laps, or now even Vedic *Ri*shis. Shamanism also demands an accurate definition; otherwise the Pythian priestess will soon be classed as a Shamaness.

Baal, the supreme deity of the Semitic inhabitants

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[1] Maspero, Dawn of Civilisation, p. 85.

[2] Le Page Renouf, Hibbert Lectures, pp. 83–87, 110–112, and particularly the excellent work of L. Oberziner, Il Culto del Sole presso gli antichi orientali, 1886.

of the Mesopotamian kingdom, was clearly a Sun-god, both as preserver and as destroyer, and so was his female counterpart, the goddess of fertility, under her various names.

But though the documents from which to study the growth of mythology and religion are much richer and have been far more critically examined in the case of Egypt, Chaldaea, India, and Greece, we need not be afraid that our a priori views will be contradicted even if we go further afield and examine the more or less trustworthy accounts of the mythological and religious folklore of savages par excellence.

Peru and Mexico.

Soon after the discovery of America it was discovered that the religion and mythology of Peru were solar to the very core, that Inti, the chief god of the Incas, was the sun, and Mama Quillu the moon, while other phenomena of nature received each their own share of worship. It was the same with the inhabitants of Central America and Mexico. With them also the worship of the sun was predominant, though mixed with that of the moon and other physical gods, such as the god of rain, of fire, of the winds, &c.

North America.

In North America Sagard[1] relates that the Shawnees, when questioned about their belief in divine beings, told the missionaries that they considered the sun as the Master of Life and the Great Spirit, because it animates everything. Dobrizhoffer in his charming work on the Abipones (ii, 89) states

[1] Histoire du Canada, p. 490.

that when a missionary had been preaching to the Moluches on the god of Christianity, they remarked 'that till this hour they never knew nor acknowledged anything greater or better than the sun.'

Lastly one of the latest authorities on the mythology and religion of the savages of America, M. G. Raynaud, in Études de Critique et d'Histoire, 2e série, p. 376, declares in so many words :—'On a pu dire, et cela très exactement, que l'Amérique tout entière, de l'extrême nord à l'extrême sud, des tribus sauvages aux peuples semi-civilisés, adora le soleil.' He afterwards explains the dualism of sun and moon.

Many more testimonies to the same effect might be added to show that Solarism had been in possession of the field long before the discovery of Vedic literature, and that its chief supporters were the ethnologists, the students of savage races, and not the much-abused linguists and Vedic scholars. On the contrary, it fell to the students of the Veda to declare, what was written in every page of the ten Ma*nd*alas of the Rig-veda, that not the sun only, but every part of nature, had contributed its share to the early Aryan pantheon. They showed most clearly and by evidence that could not be gainsaid that the Vedic Dyaus (Zeus) was not the sun, as such, but the agent of the sky as illumined and enlivened by the sun, and that Sûrya, the sun, in its more restricted activity, was hardly more prominent in the Veda than Hêlios in Greek mythology, while it assumed its dramatic character chiefly under the disguise of names that were no longer understood by the ancients, and, like the name of Apollon, have to be interpreted before they can be understood again.

In this limited form I doubt whether Solarism, whether applied to gods or heroes, has now a single serious antagonist even among ethnologists. There was a time when the very existence of solar and celestial mythology was denied, and when, as usual in the absence of knowledge and argument, it was ridiculed as drawn from that bank with unlimited liability, the inner consciousness of German professors. Times, however, have changed, and I doubt whether even the most determined Euhemerists would venture any longer to doubt the physical origin of Zeus or of the principal members of his Olympian family, or to stand up for Mr. Sun or Miss Dawn.

And was it really so very strange that the ancient mythology should have turned almost exclusively round the sun, and that the folklore of the ancient nations of the world should consist of ever so many sayings about heaven and earth? The fact can no longer be denied, the only question that remains to be answered is whether it was really, as we have been so often told, a sign of primitive folly to talk always about sun and moon, day and night, in fact, about heaven and earth.

Egyptian Mythology.

The Egyptians are not considered the fools of antiquity, yet their whole mythology is full of stories, stories more wild than the wildest of Greek myths, all being told originally of the sun[1]. They tell of Horus as the son of a father who was put to death by his brother, but furiously avenged by his son, who after defeating his adversaries succeeds to the throne of his father. What is the meaning of

[1] Le Page Renouf, Book of the Dead (p. 7).

this myth? Horus means the sun, and his victory is that of light over night and darkness (Sut and his companions), who had obtained a victory over Osiris, the sun of the preceding day. Day and night are brothers, and children of the sky.

No one seems now to doubt that in Egyptian mythology the child of Seb and Nut, heaven and earth, is the sun. But the same sun may also be considered as either the parent or the son of another sun. Horus therefore is called the son either of Osiris or of Râ. But though Râ is called the father of Osiris, the two are also identified. Hence arise numerous contradictions which disappear as soon as each myth is understood by itself. We seem almost to be listening to Polynesian mythology when we read how in Egyptian mythology Nut and Seb are represented as fast locked in slumber in each other's arms until they are parted by Shu, who raises Nut on high above her husband, which signifies in Egypt what it signifies in the Polynesian islands, namely, that heaven and earth are confused together in the darkness during the night, and that the sunlight parts them and exhibits heaven high above the earth[1]. In Egyptian the sun in this character is actually called An-heru. When the Egyptians saw the disk of the sun rise up at the extremity of the earth, they said that Seb, the earth (seb also signifies goose), had laid an egg. The very goose and the egg laid by her may be seen on the monuments of Egypt[2]. Even the swallowing and vomiting stories, which are supposed

[1] Maspero, Dawn of Civilisation, p. 129.

[2] Lefébure, 'L'Œuf dans la Religion Égyptienne,' Revue de l'Histoire des Religions, vol. xvi, pp. 16–25.

to be proofs of a primitive Greek barbarism and cannibalism, appear in Egyptian mythology without leaving any doubt as to their original meaning. Anubis swallows his own father Osiris, i. e. the sun has disappeared in the dark. According to a line in the Book of the Dead, Sut devoured the head of Osiris, or, according to another account, the eye of Horus. And here what happened to Kronos happened to Sut, he had to vomit the eye which he had swallowed, i. e. the darkness itself is compelled to bring up the light of the sun.

All these solar ideas which seem to us strange, and sometimes barbarous, were familiar not only to the Egyptians, but to the Greeks likewise. Sophocles (Trach. 94) was not afraid of being unintelligible when he spoke of Hêlios, the sun, *ὃν αἰόλα Νὺξ ἐναριζομένα τίκτει κατευνάζει τε φλογιζόμενον*, 'whom the star-spangled night brings forth, and whom, when shining brightly, she lulls to sleep.' Nay we find common sayings about day and night being sisters, one bearing the other and being born by her[1], a theme which lends itself either to riddles, or to ever so many mythological variations, one more terrible than the other.

Human Feelings with regard to the Panorama of Nature.

Our great difficulty in understanding ancient mythology, whether of civilised or uncivilised races,

[1] Anthologia Palatina, xiv, 40:—

Εἰσὶ κασίγνηται δύ' ἀδελφεαί· ἡ μία τίκτει
τὴν ἑτέρην, αὐτὴ δὲ τεκοῦσ' ἀπὸ τῆσδε τεκνοῦται·
ὥστε κασιγνήτας οὔσας ἅμα καὶ συνομαίμους,
αὐτοκασιγνήτας κοινῇ καὶ μητέρας εἶναι.

And Ibid. 41:—

Μητέρ' ἐμὴν τίκτω καὶ τίκτομαι κ.τ.λ.

is always that we are supposed to be unable to feel awed or surprised at what happens every day, what has been explained to us thoroughly from our earliest youth, and what we can calculate in its constant return to the very minute. We smile at a poet who has no more to say than that the sky is bright, and the dawn beautiful and wonderful, and yet this was a stage of poetry through which all the nations of the world had to pass. It is all the more useful if we can find a few persons who are not afraid to say once more what has often been said before, and I therefore quote with pleasure from an article written by a native of India in the Brahmavâdin, Dec. 21, 1895:—

'At the very dawn of history,' he writes, 'when man beheld the glorious orb of the day shedding an effulgent stream of light on all that exists, the night studded with myriads of beautiful stars, the crystal rills rumbling in the limitless forests, in the midst of wild scenery, when man beheld a storm spreading gloom all around, how a gentle gale made all nature bloom, he very naturally became meditative. Amazed and awe-struck at the sight of these phenomena of the natural world, he put to himself the question—What do these things reveal to me? What is the inworking light of all these? To the so-called uncivilised man living in that far-off age of faith, this panorama presented by the universe revealed the will of some unknown powers, unknown to him, and yet guiding him.'

Here we see still some of that spirit which inspired the earliest dwellers in India with their religion. These thoughts may sound to us very trite, yet they are true, and we can see how at first they could assume no form but that of simple mythology. Everything that appealed to the

thoughts of man was contained in the panorama of nature, and though the storms, the clouds, the rain, the rivers, the moon and the stars, would naturally attract some attention, nothing could stir the heart of man more deeply than the daily return of the light, the revelation of the whole earth, the daily re-awakening of nature, nay of man himself, and of all that was most dear to him. His food, his life, his happiness and the happiness of his children, all depended on the light springing up in the east, driving away the darkness, the chill, the dangers and fears of the night, restoring warmth and vigour to his bodily frame, new will to his members, new thoughts to his mind. And yet we wonder that ancient mythology could sometimes be solar, could be full of hopes and fears about the sun, should abound with names all referring to that luminary in its various manifestations, should contain the first germs of a belief in invisible powers behind the visible workings of the sun when passing over the earth and across the whole sky. If men every morning enjoyed their breath, their sight, their very appetite and the returning warmth of the body, was it so very strange that they should have looked up to the sun as the giver of it all? If the sun was hidden by clouds, if it seemed to give no warmth, if in winter their limbs were numbed, if their children and cattle were dying of cold and hunger around them, or if a sudden flash of light from the cloud set fire to their huts and destroyed in a moment all they had called their own—was it so very strange that they should have trembled and implored help from above, calling the powers above them and around them by any name they

could think of or remember? And when all was over and the blue sky visible once more, why should they not have greeted it with rapture, why should they not have spoken of their miseries, and spoken in words of praise of those who had spared or who had helped them?

Southey was not afraid to utter these natural feelings about the sun when he wrote:—

I marvel not, O Sun, that unto thee
In adoration man should bow the knee,
And pour his prayers of mingled awe and love;
For like a God thou art, and on thy way
Of glory sheddest with benignant ray
Beauty and life and joyance from above.
No longer let these mists thy radiance shroud—
These cold, raw mists that chill the comfortless day;
But shed thy splendour through the opening cloud,
And cheer the earth once more. The languid flowers
Lie odourless, bent down with heavy rain;
Earth asks thy presence, saturate with showers!
O lord of light! put forth thy beam again,
For damp and cheerless are the gloomy hours[1].

So much for the poet. But we want the man of science also to tell us the new poetry of the sun, as brought to light by the latest discoveries which better than anything else bring us back again to the old conviction of our absolute dependence on the sun which the sons of nature had not yet lost.

Names of the Sun.

To us with our wealth of words and concepts it is easy enough to speak of the sun as having life and soul, as sharing in all the glories both of manhood and of godhead. But let us now cast our

[1] Southey, Longman's edition of 1837, vol. i, p. 96.

eyes back on those distant periods when every new concept had to be conquered, and every new word had to be coined—how was the sun to be grasped and how was it to be named? If our view of the origin of language and thought is right, if the necessity is admitted, of conceiving and naming everything that is to be conceived and named by roots which express acts, then the sun could only be named as he who shines, as he who warms, or nourishes, or travels, or fights, and sets or dies. As to ascribing to that shiner, or warmer, or nourisher, or traveller an anima, where was the concept and name of anima itself to come from? The first step of the name-givers was not yet animism, but simply substantiation, or, if you like, the use of the nominative and of the third person singular. That was the first theogony—everything else came later. Given a root that meant shining (div or dyu) and Dyaus was the shiner, deva, he who shines. Given another root meaning to light (Sk. vas, us), and Ushas meant he or she who lights the world, a word living on in our East and Easter; vas-ar was the morning and the spring, preserved in Sk. vâsara, day (i. e. morning), in ἔαρ and ver, the spring. Given a root su, to excite, to enliven, and Savit*ri* meant the enlivener, which became one of the best known names of the sun. In one sense Savit*ri* may be said to be the sun, but he possesses an independent personality among the numerous names of the sun. Sûrya, Aryaman, Âditya, Vivasvat, Pûshan, Mitra[1], all are the same, all are names of the sun, and yet in the hymns of the Veda addressed to them each

[1] Later names are Ravi, Divâkara, Bhâskara, Saptâsva, Mihira, Tara*ni*, Bradhna, &c.

holds his own place. That the sun and the sky were intimately connected in the thoughts of the Vedic poets is best shown by such names as svar, gen. suras, which mean both sun and sky, while the derivative sûrya, coelestis, means the sun only, is in fact the Greek ἥλιος.

Man's Dependence on the Sun.

It may be difficult for us to conceive sky and sun as one[1], and yet even to us the sky is what it is in its active character chiefly, if not entirely, by the presence of the sun. We have but one name for sun, but we too can still see in the sun more than a gaseous ball or a centre of gravity. In the psalms we still address the Lord God as a sun and shield. Nay in spite of early astronomical instruction, I can still remember how from my earliest boyhood I have always felt my dependence on the sun. Physiologists now tell us that we could not live without the sun, that even our mortal life depends on its rays. Why are we not fat, sleepy, dull Esquimaux, if not for the sun? Do we not feel every morning cheered by the light and warmth of the sun, wide awake, invigorated in body, revived in mind? And can we even in our old age suppress our wonderment at the appearance of the light of the morning, at the vanishing of the last rays of the setting sun? We know the laws, we can calculate the path of the sun to a minute, and yet when we watch its birth from the waves of the sea (Anadyomene), or its death

[1] The confusion of Horus, the sky, with Râ, the sun, has supplied M. Lefébure with the subject of one of the most interesting chapters in his Yeux d'Horus, p. 94. See Maspero, Dawn of Civilisation, p. 100.

in the fiery clouds (Hêrakles on Oite), do we not gaze in silence, and when it has vanished say to ourselves, All is right (*ri*tam). That too may be called Heliolatry, but those who can understand it need not despair about understanding the solar deities and solar heroes of the distant past. The fool may say in his heart, Why did the ancient Âryas talk of nothing but the sun? The wise man will say, What else could they have thought or spoken about, and what else was there to remember and to tell their children and grandchildren, if not the power of the sun, the labours of the sun, the bounteous gifts, the pity and love of whoever it was that was behind the sun, at work in the air and in the sky, in the earth, nay in the warmth of man's own heart. If all this feeling for nature is childishness, unworthy of Vedic *Ri*shis, how is it that even among our own poets it is not quite extinct. I might quote ever so many extracts I have collected, eloquent with a passion for nature and a poetical reverence for the glorious king of nature, the sun, but one passage from Charles Kingsley must suffice :—

'Is it merely a fancy,' he writes in one of his Prose Idylls, "A Charm of Birds," 'that we English, the educated people among us at least, are losing that love for spring, which among our old forefathers rose almost to worship? That the perpetual miracle of the budding leaves and the returning song-birds awakes no longer in us the astonishment which it awoke yearly among the dwellers in the old world, when the sun was a god who was sick to death each winter, and returned in spring to life and health and glory; when the death of Adonis, at the autumnal equinox, was wept over by the Syrian women, and the death of Baldur, in the colder north,

by all living things, even to the dripping trees, and the rocks furrowed by the autumn rains; when Freya, the goddess of youth and love, went forth over the earth each spring, while the flowers broke up under her tread over the brown moors, and the birds welcomed her with song; when, according to Olaus Magnus, the Goths and Southern Swedes had, on the return of spring, a mock battle between summer and winter, and welcomed the returning splendour of the sun with dancing and mutual feasting, rejoicing that a better season for fishing and hunting was approaching. To those simple children of a simpler age, in more direct contact with the daily and yearly facts of nature, and more dependent on them for their bodily food and life, winter and spring were the two great facts of existence; the symbols, the one of death, the other of life, and the battle between the two, the battle of the sun with darkness, of winter with spring, of death with life, of bereavement with love, lay at the root of all their myths and all their creeds.'

Here we have the English poet who would find no difficulty in understanding the poets of the Veda, or the still older poets of Aryan mythology. Here we have the true worshipper of the sun who would not scorn the solar poetry of old, but cherish it and recognise in it the first higher aspirations of man, the first suspicions of powers invisible behind the daily revelation in the sky, behind the never-ending drama of spring and winter.

Savages.

Some of these thoughts evoked in man by the aspect of nature can be discovered even among the so-called savage races of the world. But we must not imagine that because they go naked

they are the same as the ancient Âryas. What there is now left of savages consists to a great extent of decadent races defeated in the universal struggle for life, driven back by more vigorous conquerors to the very edge of the inhabitable world, or taking refuge in deserts where there was no competition, no rivalry, no war or discord. They have become stunted intellectually and often physically also. Whoever knows Darwin's Origin of Species knows that the savages of the present day have lived on earth for as many generations as the present Âryas of India and Europe, and if they have remained on so low a level, what evidence is there that they ever had reached so high a level even as the Âryas of the Seven Rivers? There are exceptions, but many of these savages from whom we are to learn how to solve the riddles left us in the mythology and the superstitions of the ancient Indo-European conquerors of the world, seem to me like dwarfs in whom human nature became degraded at a very early time, and who, even if of late they have recovered, will never tell us what were the aspirations of the giant ancestors of our own race. One thing they may possess that is really genuine and old, their language—but that is the very thing which we are told we need not study in order to understand the modern savage.

Necessity of accounting for Mythology.

The object of all scientific research is to discover causes, and the question that students of mythology have to answer is, granting the physical origin of the gods and goddesses of Aryan mythology, how

can we discover the original character of each, how can we understand the Hyponoia, the underlying thought of the fables told of them, how can we reach the rational foundation which is covered by such an immense accumulation of what seems utterly irrational? This is a question of far greater importance than at first sight it may seem. Suppose that in geology we should find the regular stratification of the earth suddenly interrupted by a thick layer of altogether heterogeneous growth; would geologists rest till they had accounted for it? Suppose that in the development of living organisms Darwin had suddenly been confronted with birds antecedent to reptiles, with horses coming before the hipparion, with man prior to the amoeba, or with a period of inexplicable monstrosities, would he or those who follow him have been satisfied till this complete upsetting of their scientific theory, nay of their scientific faith, had been accounted for? And is not the regular development of the human mind a matter of far greater moment to us than that of the whole of nature? Mythology must be accounted for, or the historical development of man becomes a mere farce unworthy of the labours of scholars, and unfit for the speculations of philosophers.

I have always tried[1] to impress upon students of mythology, that we must distinguish between three methods or schools in the interpretation of Vedic or any other myths. Each in its own sphere has done and may continue to do some real good, but they should not be mixed up together.

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[1] Anthropological Religion, p. 426.

The Three Schools of Comparative Mythology.

There is (1) The Etymological or Genealogical school, (2) the Analogical, (3) the Psychological, or, as it has been called, the Ethno-psychological.

The first school tries to show that there are among cognate races, whether Aryan, Semitic, Ugrian or Polynesian, certain myths which had a common origin, and which existed before the separation of the various branches of these different families of speech, and that this common origin can be proved by the presence of certain proper names of gods or heroes, some of which, if tested etymologically, yield their original meaning and disclose to us the true intentions of their original framers. The best known instance is Ζεὺς πατήρ, Ju-piter, as compared with Sk. Dyaush-pitar, i. e. the bright sky as father.

The second school is satisfied with pointing out certain similarities in the character and fates of gods and heroes, even though their names are different. Thus when we are told that Chione depreciated the beauty of Artemis, and was shot by the goddess, we may find some analogy in the case of Niobe who, for exalting herself above Lêto, was punished by Lêto's children, Artemis and Apollon, and deprived of all her offspring. This would be a case of pure analogy, and it is Sir George Cox's merit to have collected a large number of such cases in Greek mythology. These analogies are most important if they occur in the mythologies of cognate languages. Nothing is more natural than that it should be so. We have only to remember how polyonymous the ancient

deities were, and how often one of their names became in time an independent deity or hero, in order to understand that the same myth with slight variations may be told of Indra and Purandara, of Artemis and Selêne, of Chione and Niobe. The material facts of the story would by themselves be of value in throwing light on the origin of such double myths, though no doubt if it were possible to prove that not only Chione, but Niobe also, who is sometimes called the mother of Chione, was an old Aryan name for snow or winter, our case would gain considerable strength and would then come under the first class.

While these two modes of treatment are guided by well-established principles, the Ethno-psychological (Völkerpsychologisch) method is still in its purely tentative stage, and dependent chiefly on taste and judgment. In comparing the myths of people genealogically and linguistically unconnected, and chiefly of tribes on the lower and lowest stages of civilised life, comparative mythologists may be quite justified in seeing in certain coincidences the result of psychological tendencies ingrained in human nature, and therefore common to all mankind, unless they think a personal contact in very remote ages not quite impossible. The three schools start all with the conviction that mythology requires interpretation. They only differ in their methods, that is, they follow different ways in order to discover the Hyponoia of ancient myths and customs.

The Genealogical or Linguistic School.

The Genealogical or Linguistic school starts from a fact which is hardly contested any longer, that

the Greeks and Romans, whose mythology has long formed the chief subject of interest to classical scholars, were closely connected by language with the other members of the Aryan family, Indians, Persians, Celts, Teutons, Slaves; and that, as these Aryan nations share the large bulk of their words in common, some of them connected with myths and customs, it is not at all unlikely that a study of their languages might prove useful for discovering the Hyponoia of Greek and Roman, nay of all Aryan myths. Of course we may be mistaken in that hope. As there are many words in Greek formed after the Aryan Separation, many, or even all, of the Greek myths which we know may have been formed in quite recent times, when all recollections of the talk of the common Aryan home had long faded away. Still if comparative scholars should bring to light from the Veda a word such as deva, corresponding to Lat. deus, meaning bright, and being used as a general name of the gods of the ancient Aryan mythology, that would seem to be as welcome a find as the most perfect Sicilian coin or Phenician sarcophagus. If then one of these Devas was called Dyu in the Veda, this Dyu being identically the same word as the Greek Ζεύς, Διός, and if this Dyu, meaning sky in the Veda, occurred there in a compound such as Dyaush-pitar, instead of Dyau*h* pitar, corresponding to a similar compound name in Latin, viz. Jupiter, Jovis, the Greek Ζεὺς πατήρ, no one could well resist the conviction that there was a real historical connection between the ancestors of Hindus, Greeks, and Romans when they formed these words and compounds, the fertile germs of mythological thought, and this at a time

previous to the Aryan Separation. We may go a step further, and prove from such equations as Sk. dâtấ vásûnâm, Zend dâta vohunâm, Greek δωτὴρ ἐάων, giver of good gifts, applied to the Devas, that such whole phrases even had been formed by the Âryas in their undivided state, and had been preserved as historical heirlooms from generation to generation.

This is the work which the Genealogical or Linguistic School undertakes to do, and whatever may be said of some of their equations, I know of no one who would condemn their method. If some critics look incredulous at such equations as vasûnâm and ἐάων, I am afraid we cannot help their unbelief. Here, also, if people wish to live, they must learn, and not pride themselves on what they call their 'gigantic ignorance.'

The Analogical School.

The Analogical School keeps likewise within the sphere of cognate languages, but in comparing their myths it does not insist on the identity of names. Wherever, for instance, they find stories about children whose father was a god and whose mother was a princess, children who were deserted by their mother, suckled by animals, brought up by shepherds, and at last recognised as rightful heirs, often taking vengeance on their unnatural persecutors, they would naturally admit a common source and a common meaning, whether these children are called Romulus and Remus, Perseus, Thêseus, Cyrus, Karna or Siegfried. Why should these researches be discouraged or disapproved of? There is, no doubt, a difference between gods and heroes of the

same name and gods and heroes of the same character only. But the work done by this school, and particularly by scholars such as J. G. von Hahn, Sir George Cox, and Mr. Andrew Lang, has proved most valuable, if only as preliminary to further research and linguistic analysis. In some cases their comparisons have extended beyond the limits of cognate languages. If the results obtained by the Genealogical School have mostly been liable to linguistic criticism, those of the Analogical School have chiefly been criticised on the ground of insufficient evidence, and of a tendency to ignore characteristic differences while laying too much stress on coincidences sometimes more apparent than real.

The Ethnological School.

The Ethnological School boldly extends its horizon beyond the narrow limits of nations speaking cognate languages. Any coincidences between the myths and customs of the most civilised and most uncivilised tribes are welcome, nay the greater the distance that separates the tribes the more important the mythological coincidences seem to become. And rightly so, for, if historical contact between them is out of the question, their agreement assumes naturally a psychological interest, because it can only be accounted for as arising from our common human nature, as rational in their irrationality, and as postulating a Hyponoia, even where that underlying reason cannot yet be discovered. Why should there be hostility between this and the other two schools? Is not the third school in reality a mere extension of the second, as the second was of

the first? Are not its comparisons both suggestive and amusing, even if they are not always quite convincing? The criticism to which the followers of this school have exposed themselves, is much the same as that which has been addressed to the defenders of the Analogical School, only in a much higher degree. It has been shown that they have often relied on unreliable evidence, that many of them have not even felt bound to learn the languages from which they have quoted, and that in consequence they have not been able to distinguish between what really is and what only seems to be identical in the superstitious customs and beliefs of Greeks and Romans, on one side, and the Khoi-Khoi or the Athapascans on the other. The excuse which formerly existed, that these languages could be studied on the spot only and at the risk of one's life, holds good no longer, when we have grammars and even texts of most of the races that inhabit the earth. And yet the same writers who despise the help of philology for the study of the customs and beliefs of savage tribes do not hesitate to criticise the results obtained by the patient study of Greek and Sanskrit students, though ignorant themselves of these classical languages, and why?—Because classical scholars are not infallible. And what can be the meaning of saying A must be wrong, because B differs from him? Is this any more than saying that B must be wrong, because A differs from him? Here surely all depends on C who can adjudicate between A and B.

But why then should not the followers of these three schools work in harmony? They have the same end in view, to rationalise what seems irrational in the

ancient beliefs and customs of the world. Let the members of each do their work conscientiously, seriously, and in a scholarlike spirit, and whatever of solid gold they can bring to light from their different shafts will be most welcome. That classical scholars should appeal first to the mythology of races whose languages they understand and who are known to be linguistically cognate, is but natural, that they should feel inclined to sift the enormous evidence collected by the numerous followers of the Analogical School, is natural also, and that they should hesitate to give more than a provisional assent to the statements made by the followers of the Ethnological School, particularly by those who quote at second or at third hand only, is the most natural of all. I speak as one who has chiefly worked within the narrow limits of the Genealogical or Linguistic School, but I have never shared the prejudices of that school. It is but too well known that there was a time when, in spite of ridicule, I ventured to descend myself into the shafts opened by the second and the third schools, and to point out what seemed to me at that time promising fields of labour. I acquired an elementary knowledge of some of the non-Aryan languages, for instance the Mohawk, and I always took the precaution to submit my tentative work to my friends, such as Bishop Callaway, the Rev. W. W. Gill, or Dr. Hahn, who are rightly considered the highest authorities, each in his own sphere of work. And yet I know but too well that I blundered, just as the best scholars have occasionally blundered, even in Homer and the Veda. Was it not natural therefore that I should have warned others against the pitfalls of ethno-

logical evidence, as soon as it goes beyond skulls and hair, and undertakes to lay bare before our eyes the secret springs of religious convictions or astounding superstitions. What has seemed to me and to many really surprising is that the followers of the Ethnological School, who are not, like Siegfried, vulnerable in one spot only, should have felt called upon to pose as judges on scholars who, whatever their failings may be, know at all events something of Greek and Latin and Sanskrit and Zend, more perhaps than what they themselves profess to know of Maori or Mohawk. What can be the object of that so-called 'journalistic mist' of which the better members of the Ethnological School have themselves complained, and which, like the dust kicked up by children on the road, is sure to fall back on those who raise it? And lastly, what can be the object of the repeated attempts to represent me as the only champion of the Linguistic School, and as the sworn adversary of the Ethnological School, when in the same breath the writer complains that I have never even mentioned his name! This is not the right temper of a true scholar. There is ample room for all of us. Very often it is not a question of aut-aut between the three schools, but rather, as far as I can judge, of et-et. Whatever the ethnologists bring us, if only it is dependable, is sure to be useful. Prof. Oldenberg has shown that he does not despise help from any quarter, though he has never wavered in his allegiance to the Genealogical School. The late Dr. Mannhardt, though he did not venture much among black or red skins, has shown how much may be done by discovering analogies between the living customs and local traditions of German and

Slavonic peasants on one side, and mythological incidents of the highest antiquity on the other. The best representatives of the three schools have been working with perfect harmony and mutual advantage so long as they recognised the condition incumbent on all, a critical study of the languages from which mythological expressions arose, and, if possible, a reference to the original authorities from which their statements are taken.

Whatever difference there may be as to the best methods to be followed in the study of ancient myths and customs, one would have thought there could be none as to the laws of logic to be followed in forming judgments on the evidence placed before us. It is well known that a kind of mosaic picture of what Aryan civilisation must have been before the Aryan Separation has been put together from words and concepts shared in common by the two principal branches of the Aryan family. We are now told that all this is an illusion, and why? Because some of these words and concepts occur in the languages of savage races also. Where is the sequitur? Is the decimal system of numeration less part of early Aryan civilisation because we find the same among savage races also? No one, so far as I know, has ever maintained that before the Aryan Separation the Âryas cultivated their memory to an extraordinary extent[1]. That applies in reality to a much later and purely Indian period. It applies even to the Srotriyas of the present day. But suppose it had been mentioned as a characteristic of the Pan-Aryan period, what difference

[1] Hopkins, Religions of India, p. 161.

would it make that the Iroquois also cultivated their memory? I cannot go through all the cases. The answer would always be the same. Suppose that every trait of the Âryas before their separation could be matched by the Iroquois, how would that affect our contention that the words common to the Aryan languages must have existed before the separation, and that what they signify must have been known at the time? Besides the very comparison of Aryan and Iroquois beliefs is sometimes most instructive. 'According to the Aryan belief,' we are told, 'the soul of the dead passes over a stream, across a bridge, past a dog or two which guard the gates of paradise.' I question the Pan-Aryan character of these beliefs; but suppose the statement were correct, why should that belief be less Aryan because the Iroquois also believed that the spirits on their journey (to heaven) were beset with difficulties and perils? 'There was a swift river to be crossed on a log that shook beneath the feet, while a ferocious dog opposed their passage.' Supposing all this to be correct, supposing that we knew exactly what the Iroquois meant by their spirits and their heaven, and by the ferocious dog, is it not most characteristic that the Âryas at that early time knew the art of building bridges, whereas the Iroquois speak only of a log to float across a river? But what then can be the meaning of the triumphant sentence? Here is the Persian's narrow bridge, and even Kerberos himself[1]! What I cannot understand is the drift of the argument. We argue because the name for father-in-law is the same in both divisions of the Aryan family, therefore this peculiar relationship

[1] Hopkins, Religions of India, p. 164.

must have been recognised before the Âryas were divided into separate nations. Does this statement become more or less true because certain savages have no such name, or because the Iroquois have it? On such terms argument would simply become impossible. Nor do I see the object of saying that 'how primitive is a certain religious idea will not be shown by simple comparison of Aryan parallels.' Who could have said so? All that Schrader and others say is that the concepts which have the same name in Sanskrit and Greek must have been known before Sanskrit was different from Greek, and Greek from Sanskrit. I do not undertake to measure the end of that Pan-Aryan period by thousands or ten thousands of years, but compared with anything else we know, such a period may surely be called primitive. And suppose, as we are told, that these primitive ideas, are really 'per-primitive, aboriginal with no one race, but with the race of man,' what then? Is it therefore less instructive to know which of these per-primitive ideas had been realised by the Âryas, long before the Vedic period, and which by the Iroquois at the present time? Are we to sacrifice the whole historical articulation in the development of the human race as known to us and to jump straight from the Veda into humanity at large? It is the greatest charm of our studies to watch this development from period to period, from station to station, to go backward from the Vedic to the Indo-Iranian period, and from the Indo-Aryan to the Pan-Aryan period. Even in modern history we do not trace a living English word like six, straight to Sanskrit sha*t*, still less to the Pan-Aryan sveks, but we go step by step from

six to Anglo-Saxon six, and then to parallel forms such as Gothic saihs, Lat. sex, and Sanskrit sha*t*; just as we derive French cinq not straight from Sk. pa*ñk*an, nor from Greek πέντε or πέμπε, but from Latin quinque, and then only, if we follow Schleicher, from Aryan pankan or kankan.

It is curious to see how justly Prof. Hopkins reasons when he determines which gods were Aryan and which were not, and when he protests against Oldenberg's attempt to make out that Varu*n*a was a borrowed god of Semitic origin.

'The modern character of Oldenberg's work,' he writes [1], 'will make it popular with anthropologists, and we may expect to hear it cited for a long time as authority for anti-solar mythologists. The more we study primitive religion, however, the more we are likely to learn that religion is not all from one seed, and that solar deities after all have existed and do exist.'

But does not the same argument hold good with regard to savage races? Why should not they also have arrived at religious and mythological ideas similar to those of the Vedic *Ri*shis or the Homeric Greeks? But this would not establish a historical connection between these different though parallel streams of thought. The Aryan stream would run its own course, and so would that of the Iroquois. The Aryan would not cease to be Aryan because it was like the Iroquois, nor the Iroquois cease to be Iroquois because it was like the Aryan. As to settling any chronological relation between the two, that is out of the question, nor has it ever been attempted to show that Iroquois civilisation was more primitive than

[1] Proceedings of A. O. S., Dec. 1894, p. cliv.

the Aryan, or the Aryan more primitive than the Iroquois. Clearness of thought is in fact all that is required for the treatment of these problems, and the smallest respect for logic would render the very proposition of certain problems impossible.

There are coincidences between the myths and customs of certain nations which as yet cannot be accounted for at all, at least not by historical contact, nor are they such as to lend themselves easily to be looked upon as the outcome of our common human nature.

If, for instance, the Fins [1] carry little stones in their pockets, and consider them miraculous or lucky, it does not follow that at one time or other they must have been in close contact with African fetish-worshippers, or have passed independently through a phase of fetishism like the Africans who, we are told, never do anything without the help of their Wongs [2]. This is again a case of non sequitur. We have our horse-shoes over our doors, and we say quite seriously that they are lucky. We do not like to dine thirteen at the same table, because people maintain that it is unlucky. But we can find explanations for such superstitions much nearer home, without having to go to Finland or to the Jolofs. I still maintain what I have often maintained, that we should begin our researches as near home as possible, and avoid far-fetched comparisons as long as possible.

Comparison of Aryan and Non-Aryan Languages.

What we have really a right to expect in comparing the mythologies and religions of savage races

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[1] Castrén, Finnische Mythologie, p. 197, note.

[2] Waitz, Anthropologie, ii, p. 183.

with those of Greeks and Romans, we may best learn if we look at the lessons taught us by a comparison of the dialects of savage races with the languages of highly cultivated literary nations. Some advantage, no doubt, can be gained and has been gained by such comparisons, but they are of a peculiar character, and very different from the results obtained by a comparison of Greek and Sanskrit, or of any languages genealogically connected with one another. Certain general principles govern the construction of all languages, whether of savage or of civilised tribes, because, after all, language is the realisation of human reason, which in its essence is the same everywhere. To discover such general principles, and to point out their presence in languages which never had any contact in historic times, is extremely valuable, but an undertaking of great difficulty. After comparing the language of the Kafirs with that of the Greeks, we may discover certain common features, but even then we should never venture to say that the language of the Kafirs was chronologically older than that of the Greeks, or formed in any sense the antecedent of Greek, or vice versâ. Such a statement would hardly convey any rational meaning, for assuming that there ever was a race of Homines alali, we have no evidence by which to fix a date when the speechless ancestors of the inhabitants of Africa began to utter, still less can we prove that this date must be fixed before or after the time when the ancestors of the Âryas formed their first roots. There are as many petrified or irregular forms in the Hottentot as in the Greek languages, showing that both must have passed through uncounted periods of development

before they became what we know them to be. But it by no means follows that these periods must everywhere have had exactly the same character and the same sequence.

What happens in grammar happens in mythology. The general principles determining the origin and growth of both language and mythology may be the same, they may be psychologically or humanly intelligible, for they are the principles followed by rational beings. Their application, however, admits of infinite variety. That we may learn some very useful lessons from the study of non-Aryan languages I tried to show many years ago, in my 'Letter on the Turanian Languages' (1856). We may learn how the principles of juxtaposition and agglutination underlie the principles of inflection as prevalent in Aryan speech, but we must not expect that the system of agglutination or of incapsulation, as carried out in some of the American languages, prevailed by necessity among the framers of Aryan speech, even if we come across such forms as yu*g* and yu-na-*g*-mi.

It is true that the system of Egyptian determinatives, as well as the prefix-repetition in the Bântu languages, gives us a useful hint as to the possible origin of what we call gender in Sanskrit, but it does not follow that the ancestors of the Âryas ever said like the Bântus[1]: 'The steamship our-ship which-ship is a great-ship—the ship appears, we love the ship,' instead of saying: Our steamship which is great comes in sight, and we like it.

What we could say with perfect truth is that

[1] Bleek, A Comparative Grammar of the South African Languages (1869), part ii, p. 107.

there is reason even in these clumsy contrivances, and that, as the Kafir also is our brother, we may discover the same kind of reason in our gender, when we say: Magna navis nostra vaporalis conspecta est, quam amamus; while the Kafir would say: The steamer, our-er, which-er is a great-er: the-er appears, we love the-er.

It strikes me that to say that the Aryan speakers must have been fetishists or totemists, would be no more justifiable than to say that they must have passed through a period of 'prefix or suffix-concord,' such as we have just described, and which exists to the present day in the Bântu family, because we find traces of suffix concord in equus bonus and equa bona.

Comparison of Aryan and Non-Aryan Mythologies.

This will give us the measure of what we have a right to expect from a comparison of the mythology of Kafirs and Hottentots with that of Hindus or Greeks. These people might well agree in a general belief that the world was made by some one, that it will come to an end, that there are powers of light and powers of darkness, that certain things are tabu or forbidden not only by human but by a superhuman authority. All this may be, and if it is so, we need be no more surprised than if we find prepositions and postpositions in their language, singular and plural, nominative and accusative, numerals from one to ten, &c. All such coincidences would be perfectly intelligible if they exist, though it is by no means necessary that they should exist. Even if we should find the same or nearly the same word for father, mother, cat, and dog in Greek and

Hottentot, we might account for such similarity by means of onomatopoeia. But if, for instance, the name for tree or stone should be the same among Kafirs and Greeks, we should simply take a note of such a coincidence without venturing to draw, as yet, any conclusions from it. In the same way, if we come across common thoughts, common myths and customs among Hindus and Australians, we may ascribe them to the common human nature of Greeks and Kafirs, we might even go so far as to admit that not only could Hindu myths and customs throw light on the myths and customs of the Australian blacks, but vice versâ also.

Under such restrictions as here pointed out, a comparison of the myths and customs of uncivilised races with those of Hindus and Greeks may be expected to produce really useful and interesting results. Why should it not? Even a comparison of the habits of men and monkeys has proved interesting, why not a comparison of Greeks and Veddahs? Only we must remember that savages deserve the same careful study as Homer or Plato, otherwise comparisons between them will prove a hindrance rather than a help to the ethnologist. The contemptuous criticism that has been passed on the work done by certain ethnologists may have seemed too severe, but it was not quite undeserved. They thought their task much easier than it really is. I shall not repeat here the warnings expressed by such men as Tiele and Horatio Hale, both, it should be remarked, extremely well disposed to ethnological research. Nor shall I repeat once more that to my mind a knowledge of the language is a sine quâ non for any honest work in this direction. Not

a word is to be said against pointing out similarities between amulets, horse-shoes, Heckepfennigs, and similar curiosities, and the so-called fetishes of the negroes on the West Coast of Africa. But this is not enough. It will leave us with mere coincidences, and their really scientific interest can only begin if it can be shown that the intention or the reason of the two was the same. The original meaning of totem and fetish was of course that in which these terms were used by those who first used them, or by those who first discovered them, North American missionaries and Portuguese sailors on the West Coast of Africa. Tampering with them is dangerous.

De Brosses and Fetishism.

We must never forget that Fetish was a name given originally by Portuguese sailors to the amulets, talismans, charms, or whatever else we may call them, found in large quantities among the negroes of the West Coast of Africa. The sailors naturally misunderstood the character of what they called fetishes; De Brosses misunderstood the sailors, Comte misunderstood De Brosses. It has been proved again and again, more particularly by Waitz, that fetishism by itself never existed as a religion at all[1], and that these fetishes formed but a small part of their religion. It was chiefly owing to De Brosses that fetish came to be used as a convenient term for anything held sacred, without there being any apparently sufficient reason for it. The stone swallowed by Kronos, the Palladium that fell from the sky, the hasta of the Fetiales, the Mên-an-tols

[1] Hibbert Lectures, Lect. II, 'Is Fetishism a primitive form of religion?'

of the Celts, all Roman Catholic relics, the crucifix not excluded, have been classed as fetishes, nay, the sun and moon themselves have not always escaped this vague nomenclature.

It seems to have been almost forgotten that even so sober a scholar as old Buttmann, the author of the Mythologus and Philologus, had a slight attack of fetishism as far back as the year 1828.

'The Latin lar,' he writes (Mythologus, p. 9), 'is evidently the Greek λᾶς, and the concept of the house-stone was changed quite naturally by means of religious ideas from a lar familiaris and protected fetish into a house-daemon.' Unaware that Hestia and Vesta can both be legitimately derived from the Sk. root vas, to shine, and mean fire, he seems inclined to connect Hestia with the Greek στία, στῖον, ψιά, ἐψία, and to see in that house-stone or hearth-stone also an 'uralter Fetisch.'

Thus fetishism became a panacea for all mythological troubles, and the acme was reached when more recently a fetish, that is, an African charm or talisman, was defined as a totem (an American emblem) inhabited by an ancestral spirit (an Indian concept).

It may be said, in fact it has been said, that there can at all events be no harm in simply placing the myths and customs of savages side by side with the myths and customs of Hindus and Greeks.

But experience shows that this is not so. There seemed at first to be no harm in the attempt of De Brosses to compare the so-called fetishes of the negroes on the West Coast of Africa with the amulets and other material objects invested with a sacred character in the religions of Greeks and Romans,

nay, even of Jews and Christians. Why should not the palladium of the Greeks, or the hasta fetialis of the Romans, be called a fetish, and why should not the same name be given to the Jewish teraphim, or to the Christian cross? The word fetish sounds always well and learned, and seemed certainly an innocent amusement. If only De Brosses had tried to find out *why* these African negroes looked upon a pebble or a shell, or the tail of a tiger as something sacred, and had then endeavoured to find out whether the same motives could be assigned to his postulated fetish-worship in Greece, in Rome, in Judaea, and among ourselves. This would have been a really scientific proceeding, very different from the employment of a high-sounding, but unmeaning terminology. Still, even that might have passed. But every carelessness, however small, is sure to be followed by a nemesis. Very soon De Brosses and his disciples, being struck by the apparent simplicity of fetish-worship in Africa as a means of explaining the sacred character assigned to any object, proceeded to represent it as the very beginning of religion among the negroes. Very soon others followed, who argued that if the African negroes began with fetish-worship, all other nations may or must have done the same. It only required a little more courage on the part of Comte to proclaim fetishism as by necessity the first step in the development of all religions. This was the nemesis, for if the prophet was right, his disciples felt bound 'à tout prix' to search for traces of fetishism in the religions of Greeks, Romans, Jews, and later on of Hindus and Persians also. It was easy enough to find fetishes, and if none could be found, all

that could be said was 'tant pis pour les faits.' We were then assured that fetishism must have existed, even though it might have left no traces behind. Another even more serious disadvantage was that after the palladium, or the hasta fetialis, or the cross had once been called fetishes, there was no longer any necessity for trying to discover by historical research by what process each of these so-called fetishes had acquired a character of sanctity and a reputation of possessing miraculous powers. Here many really useful discoveries might have been made, if the name of fetish had not been supposed to answer all questions, and to cover all sins. Nor was even this all the mischief caused by the rash generalisation of De Brosses and Comte. Two postulates underlying his theory were soon put forward openly, viz. that modern savages represent everywhere the Eocene stratum of religion, that they are the children of nature, just evolved from the earth or the sky, or, in more recent language, from our unknown Simian ancestors. This sounds very plausible as a postulate, but it has never been proved. What we know is that the languages of these modern savages are full of anomalies, which require antecedents; and that their customs, e. g. those of marriage and inheritance, are knotted and gnarled beyond anything known to us in India, Greece, or Rome. A second postulate soon followed, that however different the languages, customs and myths, the colour and the skulls of these modern savages might be from those of Aryan and Semitic people, the latter must once have passed through the same stage, must once have been what the negroes of the West Coast of Africa are to-day. This postulate has

not been, and, according to its very nature, cannot be proved. But the mischief done by acting on such postulates is still going on, and in several cases it has come to this, that what in historical religions, such as our own, is known to be the most modern, the very last outcome, namely, the worship of relics or a belief in amulets, has been represented as the first necessary step in the evolution of all religions.

Totemism.

What has been said against the theory of De Brosses, revived by Comte, as to a universal primitive Fetishism, applies with equal force to what has been called by the undefined name of totemism. We know that totem is the corruption of a term used by North American Indians in the sense of clan-mark, or sign-board (ododam)[1]. We must always remember that the name of totem belonged originally to rude emblems of animals or other objects placed by Red Indians in front of their clearings or settlements, as the arms of a city used to be placed over the gateway of its walls. It would be very difficult at present to find out whether in North America the people of each settlement took their names from these sign-boards or vice versâ. In either case, however, we can well understand that the bear or the eagle of the sign-board should in time have been looked up to as the leader and ancestor of the tribe; that the animal itself should have assumed a sacred character, and that, as a rule, people should have abstained from eating the flesh of their reputed ancestors. All this is perfectly

[1] Nind otem means my clan mark, hence dotem and totem, my mark.

human, perfectly intelligible, not to say rational, and it may correctly be called Totemism. But we must remember that all this applies in the first instance to the Red Indians only, and that not every stick or sign-post was meant for a totem, nay, that even among the Red Indians the antecedents of totems were very different. If therefore the undefined term of totemism is generalised, and we are told, for instance, that the stake to which the victims were tied at a Vedic sacrifice has to be classed as a totem, we must protest in the name of the Red as well as of the Brown Indians. If the sacrificial Yûpa may be called a totem, is there anything that could not claim the same name?

Nor does it follow that every tribe whose name is derived from the name of an animal had once worshipped that animal as a totem. A tribe, as I have shown elsewhere, may for ever so many reasons have been called bears and snakes, or have worshipped certain animals and abstained from eating them. Thus Oldendorp tells us that the Mandingos worshipped the pig, and would not eat it. But why? Because a pig had, by chance, to quench his own thirst, conducted an army of Mandingos to a well. To say that the Orsini as well as the Arcadians had once a bear for their totem, all Nâgas a serpent, all Kasyapas a tortoise, all Vatsas a calf, all Hessians (Chatti) a cat, all Soshonis or Gens des Serpents a serpent, is going too far, nay is, as we know in many cases, utterly wrong[1].

If totem which, as we saw, has its correct meaning

[1] Anthropological Religion, p. 403, Appendix III, 'On Totems and their various origin.'

when applied to the totems of the Red Indians, is transferred to a Vedic god such as Indra in his theriomorphic form, if even Mitra and other Vedic, nay even Egyptian gods are classed as totems, the meaning of that term must be very much enlarged, nay, it would become altogether separated from its original intention. What should we gain if we called Indra, as soon as he is invoked as a bull, a totem? We should only deprive ourselves of the means of understanding the process by which the Vedic poets came to apply such animal epithets to their gods[1].

The Veda itself leaves no doubt as to the process by which the names of certain animals were applied to Indra. If he was called v*ri*shan or v*ri*shabha, bull, I think I have proved by more than sufficient evidence (Vedic Hymns, S. B. E., xxxii, p. 138 seq.) that these words meant simply male, manly, strong, so that although the animal simile was sometimes taken advantage of by the poets, there is nothing to show that Indra was ever conceived as a real animal, still less as a totem. Later heroes in epic poetry also are called lions or bulls, yet there is no more idea in their case of their having been totems or possessing horns and tails than in the case of John Bull. When the Dawn is called a cow, or the mother of cows, when she is called a*s*vâ, a mare, when the sun is called a horse, a swan, or a bird in general, we can clearly see that all this is the simplest poetical metaphor. If we read, Rig-veda VII, 77, 3, that the Dawn leads the white horse, does any one doubt

[1] See on this subject the abundant evidence collected by Mannhardt in his Germanische Mythen, s. v. Sonne, &c.

what the poet means? And when in the same verse she is called the eye of the gods, is that also a totem or a fetish? As the sun flies through the air, it is called a bird or a swan, as it is very swift, it is called a racer, as the dawn steps out of the stable of the night, she is called a cow or the mother of the cows. We can perfectly understand how the sun came to be compared to one or many objects, but if the sun as a horse had been a totem, it could not have been at the same time another totem, a swan. A totem is a clan-mark, then a clan name, then the name of the ancestor of a clan, and lastly the name of something worshipped by a clan. If it is to mean anything else, a new definition should be given, or, still better, another name should be used. If, for instance, it is proposed to account for such clan names as Matsyas (fishes), Kasyapas (turtles), Agas (goats), Sunakas (dogs), Ikshvâkus (cucumbers), as survivals of totemism, I can see no great harm, though everybody knows from how many different sources national names have been derived, and how little it follows that all animals which constitute forbidden food, are survivals of totems.

So again, if anybody likes to call the wheel as representing the sun a fetish or a totem, there is not much mischief done, except that the original and scientific meaning of these terms is sacrificed, and the real origin of this solar appellation is slurred over. If fetish and totem are to be used in this all-embracing sense, we shall have to invent new names for the fetishes and totems on the West Coast of Africa, and in the North of America.

It might be possible to explain every kind of theriolatry by totemism. Why should not all the

gods of Egypt with their heads of bulls, and apes and cats be survivals of totemism? But though it would relieve Egyptologists of a great difficulty, none of the leading hieroglyphic scholars seems as yet to have availed himself of this remedy. The beasts of the four apostles also have as yet escaped, as well as the Paschal and Mystic lambs; but will they be safe much longer?

Herbert Spencer's Ancestor-Worship.

We have next to consider Mr. Herbert Spencer's theory of a primitive ancestor-worship in its influence on mythology and religion. Here it is but fair to say that much credit is due to Mr. H. Spencer for having traced the wide extension of ancestor-worship among uncivilised and civilised races. This was a real gain and showed once more the great power of generalisation possessed by that philosopher. The mischief began when he, like De Brosses, tried to represent the belief in and the worship of ancestral spirits as the most primitive, nay, as a necessary phase in the evolution of religion. A study of Vedic literature would have shown him that ancestor-worship, though it may exist side by side with Deva-worship, always presupposes Deva-worship, for the simple reason that these ancestral spirits could not have been deified except by people who had already elaborated the idea of Devas or dii. The idea that the Devas or gods of nature were deified ancestral spirits is not only contradictory in itself, but it is unsupported by any evidence, so far as I know. The true relation between the worship of the Devas of nature and the offerings made to the spirits of the departed, the

so-called Pitris, can nowhere be studied more fully than in the Vedas; yet, for some reason or other, instead of studying ancestor-worship, where it could have been thoroughly, nay historically, studied, Mr. H. Spencer has preferred to study it from the fragmentary accounts collected by missionaries among the races of Africa, particularly the Zulu tribes.

Bishop Callaway.

Nothing could be more interesting and valuable than the works of the late Bishop Callaway on the customs and superstitions of the Zulus. They belong to the very best of this class of works. The Bishop had made himself a Zulu scholar, and he enjoyed the confidence of the natives whose religious opinions he attempted to delineate. Who has not admired his account of Unkulunkulu, the great-grandfather who, as he represented him, was clearly an ancestral spirit and had nothing whatever to do with the class of physical gods, such as Dyaus and the Devas of the Veda. And yet we now receive from Zululand itself an account of Unkulunkulu from the hand, as it would seem, of a native[1], very different from that given by Bishop Callaway. The writer insists on the necessity of great care and discrimination in collecting the folk-lore of the Zulus. He says that the Zulus will produce anything they are asked to produce. 'We have,' he writes, 'in Kafir legends, an Adam and Eve; we have a Tree of Life, that if they ate of it, they should die; we have the human kind coming

[1] Inkanyiso Yase Natal (Pietermaritzburg, Natal, Lwesihlenu, March 22, April 12, May 21).

into existence from a bed of reeds, which is the repeopling of the earth after the Flood, we have the story of Joseph and many more.' But whence do they come? He then refers to the account which Bishop Callaway gave of Unkulunkulu (great-great-one or god), and throws serious doubts on its accuracy. I cannot enter here into all his speculations about the Amabele and other kindred subjects, because I do not feel competent to control his etymological speculations. But I shall quote at least what he writes about Unkulunkulu. 'The word u-Nkulunkulu,' he says, 'means, or at any rate seems to mean, the great-great-one, and this great-great-one, Bishop Callaway says, is merely some great-great-grandparent of the Zulu nation, or any other venerable ancestor.' Our informant, without knowing apparently anything of the Veda, or of the connection between deva, god, and dyu, sky, in the Aryan languages, goes on to argue that the real origin of the name of Unkulunkulu, in all its local varieties, must be found in a word expressing originally the material sky, and he compares

	Herero,	Bondei,	Swahili.
Heaven:	e-yuru,	u-langa,	mu-ingu.
God:	mu-kuru,	mu-lungu,	mu-ungu.

For Zulu he quotes i-zulu heaven, but this can hardly be compared with u-Nkulunkulu. I repeat that I can in no way vouch for the accuracy of these statements, but I quote them here in order to show how uncertain is even the very best evidence which we receive concerning the language, the customs and myths of savage tribes, and how careful we ought to be before we use it for our own

purposes. If our Zulu informant can say that Bishop Callaway 'got bogged in a philological mess,' what would he say of us if attempting to build on such boggy foundations tall structures of mythological philosophy. We ought not to be too exacting, but we ought to be cautious. If the very best work like that of Bishop Callaway can be called boggy, where shall we find solid ground?

We cannot find a better authority on Zulus and Kafirs than the Bishop himself. But if we remember how under cross-examination his witnesses contradicted not only each other, but even themselves, we shall not wonder that sometimes the evidence of different ethnological observers differs like black and white. Till very lately, for instance, it was stated in books on anthropology, that the Coreans like many other tribes, mourned in white and not in black. Mr. E. von Hesse Wartegg in his book on Corea published in 1895, states from his own observation that they mourn in black and not in white! What are we hapless students to do at home, unless we take liberties and say that probably the rules of mourning differed in different parts of Corea, or, it may be, in different ranks of society. I can admire this courage in some of our intrepid students of customs and myths, but I cannot imitate it. I know what our dangers are nearer home, and I cannot shut my eyes to dangers far away. If we can no longer quote Callaway on Zulus, or Hahn on Hottentots, whom shall we quote?

Uncertainty of Ethnological Evidence.

It should also be remembered that those who on account of long residence and intimate knowledge

of the language are best qualified to describe the customs, the myths and traditions of savage races, are most outspoken in warning students in Europe against placing implicit reliance in their statements and explanations. This is very much to their honour. Nor does Bishop Callaway stand alone in expressing distrust in his own observations and warning us against hasty generalisations. The Rev. Dr. Codrington, an authority equally high on the customs and myths of the Melanesians, who were supposed to abound in totems and fetishes, will, as we saw, have no totems in his islands. Nothing could be more useful to home students of the folklore of savage races than his remarks in his classical work on 'The Melanesians, their Anthropology and Folklore,' 1891. He points out (p. 116) the difficulty of learning the language, and still more of understanding the ideas of the Melanesians, because those ideas are not only totally different from our own, but are mostly undefined, vague, and constantly changing. Even with regard to what travellers and missionaries profess to have actually seen and heard, he warns us to be careful.

'They expect to see idols,' he writes, 'and they see them; images are labelled idols in museums whose makers carved them for amusement; a Solomon islander fashions the head of his lime-box stick into a grotesque figure, and it becomes the subject of a woodcut as "a Solomon Island god." If there is a distinction which ought to be remembered in the religion of the Melanesians, it is that between ghosts and spirits, the former being the spirits of the dead, the latter spiritual beings that never have been men, whom elsewhere we should call gods, such as the gods of the sea, the land, the mountains and valleys.

In some islands exclusive worship is paid to ghosts, in others to spirits, while there are natives who, if examined, could hardly distinguish between the two. Thus in San Cristoval a spirit is called a Figona or Hi'ona. At Florida, vigonas are beings whose power exercises itself in storms, rain, drought, calms, and in the growth of food, but the natives think they must once have been men and not simple spirits' (p. 124).

It is difficult for us to understand what can be meant by 'simple spirits,' for to us such spirits would seem superior to mere ghosts. This shows the difference in our intellectual atmospheres. An intelligent native, when brought to book as to his idea of a spirit or vui, produced the following definition. 'It lives, thinks, has more intelligence than a man, knows things which are secret, without seeing; is supernaturally powerful with mana; has no form to be seen; has no soul, because itself is like a soul.' This sounds very well, but what ideas can we connect with a being that has no soul, and yet lives and thinks, and is like a soul? We know how difficult it is to give an exact definition of anima, animus, ψυχή or θυμός, though we possess long treatises on the meanings of these names, but with regard to ghosts and spirits among the Melanesians, our authorities, whether missionaries, traders, or writers on ethnology seem troubled by no difficulties, even if they do not go quite so far as some who know beforehand that all savages must have begun with fetishism or totemism, &c.

Animism.

One more danger arising from a premature comparison between the mythologies of civilised and

uncivilised people, has to be pointed out. Animism or Beseelung or even Personification are all very good names for the various processes by which inanimate objects have at all times and in all places been changed into animate subjects. This is very different from mere fetishism, but, like fetishism, it requires an explanation and very careful definition. If Animism means the ascribing of a soul to soulless objects, this is a very vague and unmeaning answer. The first question is what kind of soul is thus ascribed, an animal or a human, or, as some hold, even a divine soul, a merely perceiving or an actually rational soul. Among savage people we have generally to be satisfied with the mere fact that they ascribe an animal form or certain animal qualities to some of their gods. But with civilised races this Animism admits of ever so many shades, and it is the duty of the ethnologist to trace every kind of animism back to its real source.

True Origin of Animism.

It is in India that Animism has been made to disclose its secret springs, and been traced back to an intelligible cause, namely the necessity of deriving all appellative nouns from roots, necessarily expressive, as Noiré has shown, of action, so that, whether we like it or not, the sun, whether called Svar or Vish*n*u, bull, swan, or any other name, becomes ipso nomine an agent, the shiner, or the wanderer, the strong man, the swift bird. By the same process the wind is the blower, the night the calmer, the moon, Soma, the rainer. Hence the large number of physical agents, the *Acteurs physiques*, whom we know as the Devas of the Vedas. These

Devas are not the sky, the sun, and the moon, they are the agents or the souls of these celestial bodies. Even the savage inhabitants of Florida and Ysabel do not take the sun itself for a person, but believe in a person who goes with the sun and whose name is sun [1]. And if we go a step further, and find Agni, for instance, the agent of the fire, represented in the Veda as a horse, we can see that this again was meant for no more than the quickly moving agent of the fire. He was never conceived as a real horse who lived and died, nor as an immortal horse, ridden by a rider. We can follow this metaphorical progress step by step. At first Agni is called 'not a horse,' that is swift like a horse, but yet not altogether a horse; then he is conceived as horse-like, and at last he is praised as possessing all the good qualities of a horse, as being well groomed, brilliant, shaking his mane, and running a race. Likewise, if other gods, such as Indra, were addressed as v*ri*shabha, or v*ri*shan, bull, we saw that this could at first have meant no more than that they were strong, and full of manly vigour. True some poets go further and speak of these bull-like gods as whetting their horns, but on the other hand v*ri*shan often means no more than strong, manly [2], nay no more than first or best; no more than he, i.e. masculine, by the side of cow or she, i.e. feminine. In the superlative varshish*tha*, lit. the greatest bull, all animal traces have disappeared, and it means no more than best. And yet some very thoughtful scholars can bring themselves to discover in these Vedic expressions 'clear traces of that faith so

[1] Codrington, Melanesians, p. 348.
[2] M. M., S. B. E. xxxii, p. 138.

characteristic of savages that there existed a blood relationship between certain human clans and certain species of animals . . . remnants of the wildest and rawest essence of religion[1].' How much more useful work might be done by explaining the Veda from the Veda itself, without obscuring it first by this kind of light from the Dark Continent! What is classed as Animism in ancient Aryan mythology is often no more than a poetical conception of nature which enables the poet to address sun and moon, rivers and trees, as if they could hear and understand his words. Sometimes, however, what is called Animism is a superstition which, after having recognised agents in sun and moon, rivers and trees, postulates on the strength of analogy the existence of agents or spirits dwelling in other parts of nature also, haunting our houses, bringing misfortunes upon us, though sometimes conferring blessings also. These ghosts are often mixed up with the spirits of the departed, and form a large chapter in the history of ancient superstitions.

Shamanism.

The various methods by which such spirits can either be brought near or driven away, have sometimes, again by an ill-defined name, been called Shamanism[2], and this Shamanism also has been supposed to have left traces in the Veda. Such traces, however, are very scant, and they could easily be matched by superstitions prevalent among ourselves, though proving by no means

[1] Oldenberg in the Deutsche Rundschau, 1895, p. 205.

[2] Shaman has nothing to do with the Buddhist Samana, priest, the Sanskrit *Sramana*. We have as yet no really scientific treatment of Shamanism, and hence no real definition of it.

that either we ourselves, or the ancient Âryas before their separation, passed through an animistic period, and through a period of shamanistic faith in ghosts or kobolds. It would be strange indeed, if something like shamanistic or animistic ideas were altogether absent in the Veda, but as to their forming anything like a complete background of Vedic mythology, all I can say is that I cannot see it, and it has certainly never been rendered visible by any Vedic scholar.

I say once more, there is no harm in all these ethnological combinations. Let us by all means consult the lower forms of religion and mythology, as possibly they may offer analogies to some features in the Vedic religion; but to call them primitive, and to represent what we see among the savages of the nineteenth century as the underlying stratum of the Veda, is surely no more than the expression of a fond hope, not of a fact established by scientific evidence. The danger here as elsewhere lies in excessive generalisation. Even the so-called stone age, which is often postulated as the universal precursor of a more advanced civilisation, is far from being universal, and exhibits totally different features when we find it, either on stratified or unstratified soil. It is the same with what may be called the stone age of the human intellect. In both cases we must learn to distinguish.

Evil Spirits.

There is no difficulty in tracing a belief in evil, unclean, and maleficent spirits, such as abound in the Atharva-veda, to the same soil which produced a faith in good and beneficent spirits. We need

not go for them to the aboriginal inhabitants of India, or to the Blacks of Australia. Some of the great Vedic gods like Rudra and the Maruts often assume a double aspect. They are unkind as well as kind, they cause diseases though they likewise heal them. If Agni, fire, is constantly invoked as pâvaka, as the purifying god, and if fire[1] was used in many places as a real or imaginary purifier for cattle and men, as destroying pestilence and every kind of disease, if it is used so even now in many parts of the world, the hostile powers which it was meant to destroy, might well assume the same personal or mythological character as Agni himself who, as the devourer of raw flesh, often assumes most hideous forms. We have plenty of evil spirits in the Veda, such as Vritra, and, in the plural, Vritras, Rakshas's, Yâtudhânas, Pisâkas, &c. Of course nothing is easier than to say that they were borrowed from the native races of India, but this, which was formerly a very favourite expedient, would hardly commend itself now to any serious scholar[2] excepting always the cases where Dravidian words can actually be discovered in Sanskrit. The Dasyus themselves or the black natives of India[3], were represented as so hideous that they might have served perfectly well as the models of devils, without our having to call in the actual devils whom they are supposed to have worshipped and to have made over to the Âryas[4].

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[1] Physical Religion, p. 284, 'Purification by Fire.'

[2] Cf. Kittel, a Tract on Sacrifice, p. 15.

[3] M. M., Letter to Bunsen, p. 83 seq.

[4] Atharva-veda XVIII, 2, 28.

The Pitris or Ancestral Spirits, Pretas.

If the Pitris, the souls of the departed, were invoked for blessings, it is almost implied that the same spirits could also withhold such blessings or inflict punishment on those who had incurred their displeasure[1]. Children, who know nothing of ancestral or other spirits, are frightened by the mere remembrance of those whom they have seen dying or in their shrouds. These are really the Pretas, the departed, looked upon as corpses, skeletons, or ghosts, very different from the departed, when conceived and worshipped as Pitris, fathers. Nervous people see visions at all times without requiring any authority from antecedent or prehistoric ages.

However, I say once more, let us never shut our eyes against new evidence, if it can help us to separate the multifarious ingredients of mythology; let us get as many parallels as we can, only let us be careful to get trustworthy evidence, and let us not change mere parallels into antecedents. If there are gods in the Veda who have no physical antecedents, let us explain them in any way we can, but if a physical type is still visible, however dimly, it ought always to be considered first.

Aryan Mythology explained by a Comparison with Semitic Mythology.

We have now to see what light we may really hope to gain from a study of the religions and mythologies of non-Aryan people, without confining

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[1] Cf. Rv. X, 15, 6.

our attention to mere savages, for a better appreciation of certain features of the religion and mythology of the Veda. Some of us may still remember the time when it was the fashion to explain Greek mythology, not indeed by the light of Kafir folklore, but by a comparison with the folklore contained in the Old Testament [1].

A very learned Greek scholar, F. A. Paley, declared that 'it was impossible to doubt that in the garden of the Hesperides we have a tradition of the Garden of Eden, the golden apples guarded by a dragon being the apples which the serpent tempted Eve to gather, or the garden kept by an angel with a flaming sword.' Mr. Gladstone seemed to favour similar ideas, ideas which at the time of Bochart and Huet were looked upon as beyond the reach of reasonable doubt [2]. Even now a Journal is published in France, Revue d'Exégèse Mythologique, in which there are learned articles on such subjects as 'Les Mythes d'Apollon et de Diana, expliqués d'après la Bible.' It may be called mere prejudice to object to all comparison between Semitic and Aryan mythology and folklore. If there are traces of undifferentiated humanity to be found among the Kafirs and Veddahs which lend themselves to comparisons with Vedic folklore, why should not the Semitic nations also have preserved something of that common heirloom? If all nations were once unmitigated savages, why should nothing of what we call Semitic date from that antediluvian period of universal humanity or universal savagery? The late Professor Robertson Smith has tried to point

[1] Science of Language, ii, p. 510.

[2] L. c., p. 505.

out Semitic customs that seem to admit of comparison with the customs of non-Semitic savages, and though some of our best Semitic scholars have been slow in accepting these identifications, still, unless we suppose that the Semitic character was so strong that it transformed and absorbed all antecedent elements, there is nothing to be said against the principle which he defended. It will be useful, however, to search not only in the Old Testament, but likewise in the Talmudic literature, nay in Phenician and Babylonian folklore, for traces of ante-Semitic customs and superstitions which might lend themselves for comparison with Aryan mythology. Thus, if it proved difficult to discover traces of Animism in the Old Testament, it has been rightly pointed out that Animism is rampant in an ancient hymn ascribed by St. Augustine to the Jewish Church, the Benedicite, which still forms part of our own Church service. This shows, at all events, the wonderful continuity of human thought among Semitic as well as among Aryan nations.

No doubt, the results of comparisons between Aryan and Semitic mythology have hitherto been small and disappointing. It is often said that what remains of these labours is not much more than the recognition of the original solar character of Samson, and even in this case it is Aryan mythology rather that has thrown light on Hebrew mythology, than vice versâ. As to other comparisons, such as that of Yama and Yamî with Adam and Eve, though tempting at first sight, I shall have to explain afterwards why it can no longer be considered tenable. Some other comparisons between Greek and Semitic names of gods and heroes lately put forward with

wonderful sang froid, really take away one's breath, when one remembers how carefully comparisons between Greek and Sanskrit names have been worked out, and have yet failed to satisfy the conscience of many a classical scholar.

It is curious to see how the same scholars who express the gravest doubts as to the phonetic similarity of names such as Varu*n*a and Ouranos, are satisfied with the vaguest similarities when they compare Semitic and Aryan names, without even attempting anything like a scientific etymological analysis.

M. Victor Barard, for instance, in his Essai de méthode en mythologie Grecque, after trying to show that certain Arkadian gods were borrowed from Semitic sources, throws out the hint: 'Presque tout l'Olympe grec est peut-être d'origine sémitique.' This is a bold peut-être, particularly when we examine the fragmentary evidence adduced in support of it. Astynome, we are told, may stand for the Semitic Ast Naama, Orchomenos and Erigone for Erek Hagim, Chalcis for Kart, Pelasgos for Peleg, and Aphrodîte for Ashtoret. We are told that machanah is the Phenician name for camp, and that therefore Μυκῆναι, Μηκώνη, Μύκωνος, Μιγώνιον, &c., must all be accepted as corruptions of this Phenician machanah. It is impossible to refute such assertions, because there is really no evidence to lay hold of and to examine. We have guesses and assertions and nothing else. In the case of Aphrodîte it has never been denied that her later character was influenced by the worship paid to and the legends told of the Semitic goddess of love. But few Greek scholars could be persuaded that the name of Aphro-

dîte was a Greek failure to pronounce Ashtoret, and that the Greeks had no goddess of beauty and love, no Greek Charis, no Aphrogeneia, no Anadyomene, no Enalia, no Ourania, no Aglaia, before they heard of the Kypris, the Kythereia, the Paphia, or the Pandêmos, and were induced to recognise in the misshapen statues of Ishtar, and in her licentious worship, something akin to their old goddess Charis, the daughter of Zeus and Harmonia. How Semitic scholars would rejoice if they could produce at least one equation such as Aphrodîte = Sk. Abhrâd-itâ, i. e. come forth from the cloud; yet no Sanskrit scholar would even listen now to such a comparison.

Dionysos and Semele.

So long as there seemed to be some ground for supposing that the Aryan words for wine were derived from a Semitic language, there was some excuse for looking to a Semitic language for an explanation of the name of Dionysos or his mother Semele. But now that the evidence points clearly to an Aryan origin of οἶνος and vinum, even that excuse is gone. We are told, nevertheless, that because a Phenician inscription has been found in a bay to the West of the Piraeos[1], containing the name Pen 'Samlath, the face of 'Samlath, therefore Semele, body and soul, is a corruption of the Phenician 'Samlath. How 'Samlath became Semele is hardly asked. No doubt it is true that words borrowed from foreign languages are liable to very capricious changes. But there is method even in

[1] Hibbert Lectures, Sayce, p. 54.

caprice, as has been shown by Weisse, Saalfeld, and others, in treating of Greek words imported ready made into Latin. Unless we follow the old principle of principiis obsta, we shall soon drop back into the days when Jovis was derived from Jehovah. A Babylonian origin has already been assigned to the name of Dionysos. Mr. Fox Talbot declared that the name of the Sun in Assyrian theology was Daian-nisi or Dian-nisi, 'the judge of men,' and Mr. Robert Brown, jun.[1], thought he could discover in this the original name of Dionysos. This conjecture, however, is no longer accepted even by Cuneiform scholars; no scholar now, I believe, approves of it.

The same spirit has shown itself lately in a comparison between Aryan mythological names occurring in the Lycian inscriptions. Here not even the grammatical character of the inscriptions has as yet been settled, and yet Canon Rawlinson was bold enough to see in the word Lada, occurring at the beginning of several Lycian inscriptions, a word akin to the English Lady, i. e. hlafdige. Nay of late we have been told that the same Lada may be connected with Lêto or Latona, the mother of Apollon. Lêto is no doubt a very troublesome name, and there are various difficulties which we shall have to examine, and which have made many scholars hesitate to connect it with Lat. latere or Greek λαθ in λανθάνω; but what are these difficulties[2] compared with this

[1] Transactions of the Royal Soc. of Liter. viii, 297; The Great Dionysiak Myth, ii, 209 (1878).

[2] See now Edwin W. Fay, Am. Journal of Philology, vol. xvi, p. 4.

Lycian etymology? Here a strong protest is necessary indeed, if we do not wish to slide back into the school of Bochart.

That Semitic nations, whether Phenicians or Babylonians, or even Jews, have exercised an influence on the outer life of the Greeks, on their arts, particularly the arts of building and writing, their dress, their commercial customs, &c., is clear enough, but their inner life, their familiar language, their home-grown religion and mythology developed uninjured by contact with foreign nations, and retained so sharply marked a national character that casual foreign importations, such as, for instance, Melikertes or Belos tell by the very contrast their barbarian origin.

Uncertain Character of Ethnological Evidence.

If, then, so little real advantage could be derived from a comparison of Aryan with Semitic mythology, as little as of Aryan with Semitic languages, have we any right to expect a richer harvest from a comparison of the Greeks with illiterate races, such as the Kafirs, or Veddahs, or the Mincoupies?

I say all this, not as an opponent on principle, but rather as a former believer, who by sad experience has come to the conviction that the evidence derived even from the most careful observers of savage tribes, and their mythology or religion, cannot be used whether for far-reaching theories, or for minute comparisons[1].

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[1] Introduction to the Science of Religion, p. 248. On Polynesian Mythology, p. 273; Mythology among the Hottentots; India, p. 150.

There are certain mythological ideas, such as the Deluge, for instance, which by their very recurrence among many and widely separated nations show that they did not arise from some isolated historical fact, as even Huxley seemed to imagine, but that they express physical phenomena which occur and recur regularly ever year and all over the globe [1].

Again, the conception of Heaven and Earth as a married couple, their separation and reconciliation [2], all this assumes no doubt a clearer aspect when we see it repeated in ever so many ways by Polynesian Islanders, by Vedic poets, by Egyptian artists, and by Greek philosophers. But if comparative mythologists move in fear and trembling on the thin and often most dangerous ice of Vedic and Homeric texts, it may easily be imagined what their feelings must be when they are asked to take their stand on the quicksands of Polynesian, African, or American folklore. The result has been that though students are interested in the strange fables collected from among the lowest and most uncivilised of human beings, no true scholar would accept any comparison between them and the folklore of the Vedas or Homer as really authoritative until fully demonstrated on both sides. This general feeling among scholars has been well expressed by Dr. Dahlmann in his excellent work on the Mahâbhârata (p. 96):—

'Is it really necessary,' he asks, 'to ascribe all the customs and all the abominations of savages to the

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[1] India, pp. 133–9. Introduction to the Science of Religion, p. 256; F. Andree, Flutsagen.

[2] India, p. 150.

dawn of civilisation, as if no civilised race could have risen to its higher morality without beginning with the vilest aberrations?'

Tapas.

Let us take one or two more instances. There is a very difficult word in the Veda, namely, tapas. It means heat, fervour, afterwards austerity, brooding, and meditation. But how can these meanings be held together [1]?

Many explanations have been put forward more or less tentatively, for it requires a considerable amount of ignorance to speak positively on such a question as the development of the meanings of words in the minds of ancient people.

The excellent Dictionary edited by Boehtlingk and Roth gives the meanings of tapas in the following order: 'heat, warmth, glow, pain, wailing, voluntarily accepted suffering, self-torture, ascetic exercises, whether consisting in abstinence or painful practices; lastly, absorption in the invisible, self-contemplation.'

This is a fair account of the different meanings of tapas, yet it is not easy to see the transition from heat and pain to absorption in the infinite, nor is it always clear which of these meanings is applicable to the passage in which the word occurs. When Brahman is said to have performed tapas in creating the world, I thought that the nearest approach to the meaning of tapas was what we call brooding, a word which includes both the meaning of heat and of thought. I was called hard names for this

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[1] See Brahmavâdin, vol. i, No. 9.

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[1] See Brahmavâdin, vol. i, No. 9.

more particularly animal heat, which, when ascribed to Brahman, came to mean the generative heat or the desire for the creation of the world. This heat in a human being would mean at first warmth, then energy, enthusiasm, bodily and mental glow, and then, according to Indian ideas, mental absorption, concentrative and meditative. Thus aikâgryam, i.e. concentration of the mind and the senses, is called paramam tapas, the highest tapas. This restraint of the senses and of the mind, which was at first a means only to an end, became afterwards itself the chief end, and hence the violent self-inflicted tortures of the later tapasvins, whose tapas was neither warmth nor light, but simply the most intense and frightful suffering.

Seeing Visions.

If then we meet in Vedic literature with such simple rules as that a pupil, when learning a sacred text, should keep silence and keep his eyes closed, why should we interpret this as a proof that the pupil was afraid of seeing terrible visions (p. 416), while merely a wish to avoid any external disturbance or to produce aikâgryam would amply suffice to account for precautions which we meet with everywhere, precautions which were prescribed by the Pythagoreans, nay, which every Roman observed when covering his head with the toga while engaged in prayer. Of course it may be said that all these were survivals of a previous period of savagery, but this terror of the gods, particularly of Rudra, does not seem to me to have been a very prominent feature in the religion of the Vedic people. People may persuade themselves that low as the civilisation

of the Vedic people was, it is possible, nay, it is necessary to admit that it was preceded by a still lower phase, thus going on ad infinitum. But why these earlier stages should have been at all like what we see to-day, or what was seen but yesterday among the Red Indians and their medicine-men, or among Tataric tribes and their Shamans, has never been explained. Surely we cannot admit anything like an historical continuity between the savages of North America or any of the savageries scattered all over the world, and the postulated savagery of the Seven Rivers. There may be, and no doubt there are, certain analogies, but we must guard here, as elsewhere, against the danger of mistaking analogies for antecedents, and fixing on an explanation from without, instead of looking for an explanation from within.

Prof. Oldenberg on Hindu Sacrifices.

Professor Oldenberg writes :—

'To what times do the ideas belong which influence the Hindu, who, wrapped up in dark skins, sits before the sacrifice, fasts near the magical fire till he grows emaciated, and tries to produce internal heat; who, after the sacrifice bathes in order to get rid of a dangerous supernatural fluid (?) present in the sacrifice, cleans himself by water from an adherent substance of disease and a substance of guilt, and burns them in the fire; nay, who puts on black garments and kills black animals whenever he desires that black clouds should cover the sky; who throws herbs into the water in order to produce streams of rain to fertilise his meadows? All this is not Indian, nor is it even Indo-European. The African negro, the Australian, the American Indian

do often, in the most striking conformity, exactly the same.'

I ask, What can be the meaning of this? Why is this, which is supposed to be the description of an ancient Vedic ceremonial, said to be not Indian, nay, not even Indo-European? It would surely be as thoroughly Indian as it is thoroughly negro, Australian, or American Indian, provided always that exactly the same ceremonial customs can be proved to exist among these savages. Why should not the Âryas in India in the later Brâhmanic period have developed puerile superstitions similar to those of the negroes, and why should such superstitious customs be less intelligible in India than in Africa? And is it not strange that most of these absurd or savage customs are clearly secondary in the Veda, and peculiar to the Brâhma*n*as, not to the Mantras, except those of the Atharva-veda? I have several times tried to show how the customs of civilised races throw light on those of savage tribes, nor should I deny that in some rare instances the customs of savage tribes may reflect light on the customs of civilised races. All I maintain is that we must possess a complete insight into the one as well as into the other, before we can hope that our comparisons may be of real scientific value. Our chief difficulty in analysing the myths and customs of savage tribes is always the same, namely, that their myths and customs have no historical antecedents. We know the state they have arrived at at present, we know the surface, but we have neither tradition nor history to help us to understand their deepest roots or motives. Some of the absurdities in the

Vedic ceremonial can be and have been traced back to misunderstandings of some simple Vedic texts, while nothing of the kind is possible among the savages of Africa or Australia, or even among the Shamans in Asia or America.

The Dîkshâ.

Let us take another case. The Dîkshâ has been very carefully examined by Prof. Oldenberg, and explained by him as meant to excite an ecstatic state which helps forward an intercourse with gods or spirits. It may have been so in ante-Vedic times, of which we know nothing or very little, but should we therefore lose sight of what seems to be a much more natural explanation, and one much more in harmony with Indian ideas, namely, that this initiatory ceremony was meant as an act of purification and sanctification, or like the Upanayana, as a symbolical representation of that new birth [1] which distinguishes the three upper classes, as fit for sacrifice (yagñiya), and secured to them in the post-Vedic literature the name of Dviga, or twice-born?

This, at least, is the idea which the Brâhmans themselves—and they too have a right to be heard when their cause is pleaded—recognised in their Dîkshâ (see History of A. S. L., 1859, pp. 390–405), and we should gain little if we tried to discover, with the help of African customs, another meaning hidden in these rites, or another origin of the whole ceremony.

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[1] 'He whom the priests initiate (by means of the Dîkshâ ceremony) he is made again to be an embryo (he is born again).' Aitareya-brâhmana, Hist. of Anc. Sanskrit Lit., p. 393.

Pancake Tossing.

When reading how, at the conclusion of the Vedic winter season sacrifice about Christmas, pancakes were thrown into the air and caught again, then hung up in two baskets at the ends of a beam as an offering to Rudra Tryambaka, what would be more natural than to compare this proceeding with the well-known old and still-existing custom at Westminster School, where, on Shrove Tuesday, the cook has to toss a pancake into the air so as to clear the beam in the roof, and catch it again, before it is eaten by the boys? But with all this, the reason why, the one thing that really interests us, remains here also as dark as in the case of Maoris or Mincoupies. I doubt whether there is a single Vedic or even Aryan custom the secret springs of which have been successfully unearthed in Africa or America, because they could not be found nearer home. If Prof. Oldenberg (p. 55) maintains that 'in a hundred cases what as an ancient and petrified survival is difficult to understand in the Veda has been rendered intelligible when found among Naturvölker, where it had retained its living significance,' I can only say that we ought to have these hundred, nay even ten cases fully described where the Veda has received such services from savage races, as Prof. Oldenberg himself has rendered to it by his independent, patient interpretations, based on a careful comparison of scattered passages of Vedic hymns. Nor must we forget that even in cases where motives of Aryan customs have been discovered among lower savages, the number of motives that can be supplied from the rich treasury of ancient and barbarous customs

is so large that it is often hard to say which should be chosen. For instance, when in India a student is ordered to sleep on the earth, this may be no doubt explained by his fear of evil spirits which haunt his bed, while when he is forbidden to sit on the earth, this may again be ascribed to his fear of falling under the influence of the spirits of the departed, to whom the depths of the earth are believed to belong (see Oldenberg, p. 417, ll. 1 and 25).

Who is to help us out of this dilemma, this real embarras de richesse, particularly when we are told that the same fear of evil spirits was the cause of the young married couples not sleeping in their bed for three nights (p. 465)? On principle there can be no objection to our pointing out such similarities, for, after all, the negroes also are men. What I doubt seriously is whether such comparisons possess any practical utility as helping us to a better understanding of Vedic customs and superstitions. Why should not the warning against sleeping on the ground during certain seasons of the year have a much simpler reason, namely the prevalence of snakes or insects during very damp or very hot parts of the year? This may seem a very prosaic view. But if we look for more remote reasons, we run the risk of obscuring rather than elucidating the character and purpose of Vedic rites by a comparison with the customs of so-called Naturvölker which, we must honestly admit, we understand even less than those which they are meant to explain.

Of course there are rites connected with the birth of children everywhere; in many cases there are festivities connected with the naming, the first

feeding, the first tooth, the first hair-cutting[1] of a child, while the reaching the age of manhood is naturally the most important event in a young man's life, whether celebrated by the 'cruel rite,' or by the English festivities of coming of age.

Cruel Rite.

However different the stages of civilisation may be, there must be a common human element in these celebrations, and so there is, as is clear from the most casual inspection of the Grihya-sûtras[2]. But if there is something peculiarly Aryan or Indo-Iranian, or even peculiarly Indian and Brâhmanic, it is the Upanayana, the apprenticing of a boy to his teacher, and I doubt very much whether we should gain anything by looking upon it as a remnant of the puberty ceremonies so common among savage people, and sometimes called the terrible rite. The Upanayana is the acceptance of a pupil by his Guru. We are told that the statutable age for this ceremony was from seven to eleven years of age, which number was at a later time connected with the number of syllables in certain metres; but that it might be postponed if any necessity arose. It cannot therefore be looked upon as a survival of the joyful or painful festivities connected with the reaching of manhood or the admission into the clan, as prevalent among the Naturvölker, wrongly so called, for they are often the most unnatural of nature's sons. In India it is the most quiet and solemn ceremony, by which the

[1] See an excellent treatise by Berini, The Tonsure Ceremony, Bangkok, 1895.

[2] S. B. E., vols. xxix, xxx, Rules of Vedic Domestic Ceremonies.

Guru or teacher becomes the spiritual father of his pupil and undertakes to educate and teach him. This education lasts till the pupil has reached the age of at least sixteen to twenty [1]. Then only is he allowed to marry, to light a fire on his own hearth, and thus to become a householder (*grihastha*), enjoying all the rights of a full-grown man [2]. The girdle with which he was invested as a pupil, and the staff which was given to him at the time of the Upanayana, as well as at the time of the Dîkshâ (Kaus.-sûtras, 59, 27), had at a later time to be thrown away into the water, and to be replaced by a new one.

I believe that a careful comparison of the Upanayana (beginning of the apprenticeship) and the Samâvartana (returning home) in Vedic India with the so-called terrible rite of some of the Nature-people, would bring out a far larger number of points of difference than of agreement. If nevertheless some scholars prefer to treat these Brâhmanic rites as survivals of a more ancient custom, supposed to have existed in pre-historic times among the Âryas of India also, as it now exists among the Blacks of Australia, no serious objection can be raised, provided that care is taken against such comparisons leading to confusion of thought rather than to a clearer insight.

The Agriology of the Future.

There may be a brilliant future in store for these agriological researches, as soon as the Universities shall possess as many and as learned professors of

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[1] Manu III, 1.

[2] M. M., Hist. of A. S. L., p. 204.

Hottentot as they now have of Sanskrit. But if the translation of the Veda has been declared by no incompetent judge to be the work reserved for the next century, what century will it be when there will be scholars who know the dialects of the Australian Blacks as we know the dialects of Greece? I know there are some excellent scholars who have honestly worked at the languages of savage races, and I am the very last person to depreciate their labours. But let us remember that they are pioneers and stand almost alone, each in his own department. If then, after the work carried on for centuries by thousands and thousands of scholars, there is still considerable uncertainty about the meaning of words and of whole passages in Homer, if controversy is still raging violently among students of Greek as to the origin and true character of certain Homeric deities, and of the object of the Eleusinian mysteries, does not the scholar's conscience warn us against accepting whatever in the myths and customs of the Zulus seems to suit our purpose, even on the authority of men who (like Dr. Callaway) are honest enough to warn us themselves against accepting their account as thoroughly trustworthy? Many scholars hesitate to accept Welcker's account of Greek mythology, but if a traveller describes a custom or a myth on the authority of a casual native informant, his statements are accepted as trustworthy, for the simple reason that they have never been contradicted. Of course, there are degrees of authority, and we ought to make a great distinction between men such as Castrén, when describing the mythology of the Fins, who possess a kind of literature, and missionaries or lion-hunters when giving an account

of the religion of Dahomey. But even in following scholars such as Castrén or Lönnrot, we should always be on our guard against too rapid generalisation.

The very next chapter will show, I hope, that I have been by no means prejudiced against a comparative study of the myths and customs of what may be called, if not uncivilised, at least half civilised races. I have studied many of them, and, as a kind of Eirenicon, I venture to give a few notes which I made some years ago when trying to gain an insight into the religion and mythology of Ugrian Tribes, so carefully described in the Journal of the Société Finno-Ougrienne.

CHAPTER III.

THE ANALOGICAL SCHOOL OF THE SCIENCE OF MYTHOLOGY.

Analogies between Aryan and Non-Aryan Mythologies.

I HAVE always held that next to a genealogical and etymological treatment of mythology, nothing is more useful than an analogical treatment, only that for such a purpose I prefer mythologies which have been studied by scholars, not those that have been picked up at random by travellers, often ignorant even of the languages in which these myths grew up. I prefer, therefore, for the purpose of analogical treatment, the religions of Mexico, Peru, or Central America to that of Melanesians and Australians; I prefer the mythology of Ugro-Finnish tribes to that of the inhabitants of Africa. I should never attempt, of course, to derive the beliefs of the Âryas of India and Greece from those of the Fins or the Incas, nor vice versâ; but I feel deeply interested whenever I meet with similar sentiments and thoughts among races clearly unconnected by language or blood, and not likely to have been brought into personal contact at least during the six thousand years which constitute what we call our history.

Mordvinian Mythology.

If I select for my purpose the as yet little known mythology of the Mordvinians, I do so for several reasons. I fully admit that our knowledge of that mythology is as yet imperfect, as compared with what we know of Greek or Vedic mythology. But even this has a certain advantage, because the myths of these Uralic tribes have escaped anything like a systematic treatment. Besides, in studying Mordvinian myths and customs, we are in the hands of scholars, and there is even a kind of literature to which these scholars can appeal.

We possess some documents, such as prayers, incantations, and proverbs, in Mordvinian, and we have the accounts of real scholars as to the present state of religion or superstition among them. I have put aside all accounts except those that come from persons who possessed a knowledge of the Mordvinian language and its dialects. We have an additional security in the fact that their observations were published under the authority of the Finno-Ugrian Society, from whose Journal my information is chiefly derived.

Mordvinian Gods Solar.

We learn from the pages of that Journal, vol. v, that the principal god of the Mordvinians was Chkaï. The word for sun is chi, but even apart from the similarity between this and the name of the deity, the Mordvines seem never to have been in doubt as to the solar character of Chkaï. His eldest son, Inéchké-Paz, is sometimes called Chi-Paz, and this means god of the day or of sunlight (p. 109). There

is also a goddess called Chimavas, which means mother of the sun ; while Od-koöuava is the mother of the new moon (p. 132).

Erzjanes and Mokshanes.

There are dialectic differences between the two divisions of the Mordvines, the Erzjanes and the Mokshanes. The Erzjanes, for instance, use Tchim-Paz instead of the Chkaï of the Mokshanes, but in all essentials the two may, at least in the present state of our knowledge, be treated as one and the same.

Solar Character of their Religion.

Mainof remarks (p. 13) that the first place among the objects worshipped by the Mordvines, as by other primitive people, belongs to the sun, sometimes as the rising sun and life-giving luminary, sometimes as the voracious fire which makes no distinction between sinners and saints, but devours all that it meets. The Mordvines say their prayers while turning towards the sun, and they believe that Chkaï lives in the sun, or is the sun. They never cross the sunbeams that enter their chambers through the windows, for fear of treading on the feet of Chkaï, nor will they row across the reflection of the sun on the river, for fear of giving Chkaï a blow with their oars.

Chkaï they say (p. 14) has large eyes, and sees all that happens on earth ; but as he is very busy, and as men try hard to hide their evil deeds from him, he has to employ a number of women to look about for him, and to report to him in the evening all they have seen and heard.

The Mother of Wheat.

When one of these women happened to be late in reading her report, Chkaï scolded her, but she replied that she had been kept back on her way by ever so many hungry people whom she tried to feed, yet she had not been able to satisfy more than 'five grains of the sand of the sea.' Chkaï forgave her, and she turned out to be Narou-ava, the mother of wheat.

Friday as Holy-day.

Another woman who, in order to bake bread for orphan children, had been working all Friday, was taken up in a dream to the sun, and while she was nearly dying from the heat, and from a piece of dough she had put into her mouth which was growing so as nearly to suffocate her, Chkaï looked out from the sun, and said that she was being punished because she had baked bread for the orphans on a Friday. She was commanded to tell all the people so, and Chkaï promised that he himself would take care of the orphan children after she was dead. The woman replied very disrespectfully: 'But who will be such a fool as to believe me?' And therefore Chkaï put his mark on her forehead, a kind of blue and scarlet colour, which is considered to bring luck. After that the Mordvine women did not work and prepare their dough on a Friday, and Friday was thenceforth called the day of Narou-ava.

Earth, the Wife of the Sun.

Whatever the origin of this story may have been, whether it shows a Mohammedan influence or not, it can leave no doubt in our mind that originally

Chkaï was meant by the Mordvines for the sun. Being the sun it is natural that here, as elsewhere, the earth should be his wife. And thus we read in one prayer (p. 91): 'Chkaï and Védiava, our father and our mother, bless our cattle, bestow on it health, growth, and fecundity. Let neither wild beasts nor maladies injure it, may it be tall like the trees of the forest, stronger than iron, larger than our house, more prolific than the fishes. May it be so numerous that the stable cannot hold it.'

Their Family.

Chkaï is said to have had eight children from his wife Angué-Patiaï, four sons and four daughters. Though she was the mother of these children, Angué-Patiaï always remained a virgin (p. 109). Sometimes it seems as if there were two Angué-Patiaïs, one the youthful virgin, the other the kind-hearted mother. Dwelling invisible in the sky, where she spins the thread of each life, she sometimes descends on the earth, and is seen as an old woman in the streets, come to help mothers in their confinement (p. 141). Kind though he was, Chkaï never allowed his supremacy to be questioned. Once therefore when his wife had acted without consulting him, he counteracted all her work, and when she complained, he told her, rather rudely, that she might be able to perceive the breath of an ox, but that he could hear the breath of a chicken.

God of Fire, the First Son.

The first of their sons, Inéchké-Paz, is almost the ditto of his father, a god of light, of fire, of the sun,

and the sky. But he sends not only light and warmth on the fields, he also sends warmth and love into the hearts of men. The whole world being represented as a bee-hive of four stories, Inéchké-Paz rules in the highest story, which is inhabited by the souls of the blessed, changed into stars.

The other Sons.

The second son was Ver-nechké-vélén-Paz, god of the hive of the world. He dwells in the second story of the great bee-hive, which is in fact our earth.

The third son is Nouziarom-Paz, god of the night and of sleep, sometimes confounded with Mastyr-Paz, the son of his sister Nouriamava, of whom more hereafter. As god of the moon (masc.), he bears the name of Odkoüozaïs. In this character he receives his father, the sun, by night, and lets him go out again by another door in the morning. He also receives the souls of the departed in order to judge them. After that he sends the good to his brother Inéchké-Paz, keeping the bad with himself, or sending them on to Chaïtan (Satan?) This reminds one of the moon in the Veda as the temporary abode of the departed before they reach the highest perfection.

The fourth son was Oultsé-Paz or Voltsé-Paz. He is the protector of the flocks, and the giver of increase.

The first daughter, called Nechkendé-Tevtèr, is the goddess of the bees. Bees are considered by the Mordvines as the most intelligent of insects, and as endowed with prophetic powers. Honey is an essential article of food among them. Nechkendé-Tevtèr became the mother of Pourguiné-Paz, the

god of lightning, also called Pourgas. She became his mother by the mere look of her father Chkaï.

The second daughter, Nouriamava-Aparotchi, is the protectress of agriculture. She was assisted in her work by her brother, Nouziarom-Paz, and on awakening from a trance, she bore him a son, Mastyr-Paz, the god of the earth and giver of fertility, supposed to dwell in the centre of the earth. He is also the god of the lower regions, where his doorway is guarded by dogs[1]. To help the departed to drive these dogs away, a stick is placed in the coffin of every Mordvinian, whether man or woman (p. 75).

The third daughter, Paksia-Patiaï, goddess of the meadows, had likewise a son whose father was unknown, and who was called Ved-Paz.

The fourth daughter, Véria-Patiaï, the goddess of fruits, had a son Varma-Paz[2], god of the air and of the winds. His father also is unknown.

This latter fact was not considered at all derogatory to the dignity of a god, as little as it was among men and women in Mordvinia. It was not considered a disgrace to an unmarried woman to have a child; on the contrary, women who had had a child were preferred in marriage, as likely to have children hereafter. Such children were called blaggaï (p. 102), literally children of accidental meeting, and they were highly esteemed in a family, because they might be the sons of gods or spirits.

Good and Evil Spirits.

Of these spirits there were ever so many,

[1] This reminds us of the two dogs which in the Veda also the departed has to pass on his way to the Fathers.

[2] Instead of Paz and Patiaï, the Mokchanes often use ozks and ozaïs.

particularly among the Erzjanes. They tell us that when Angué-Patiaï saw that she could not defend the creation of Chkaï against the wiles of Chaïtan, she took flint and steel and every spark became an Ozaïs or a little god. But Chaïtan also took two flints and the sparks which he produced became evil spirits. In this way the two have been going on striking flints till the whole world has become full of good and evil spirits, and there were more sparks of Chaïtan than of Angué-Patiaï. Almost everything in nature has its presiding spirit. The good spirits are those of the birch trees, the oak trees, the lime trees, the fir trees, of the stallions, the mares, the swine, the sheep, the bees, the fields, the tools, &c.

While these smaller deities are especially popular among the Erzjanes, the Mokshanes show great respect to a god of their own called Soltan, who, though created by Chkaï, is really another Chkaï himself, only in his active capacity. He is engaged in a constant fight against Chaïtan and is called the lord and ruler of the world (Mastyr-Kirdy). Besides him the Mokshanes have a number of goddesses of their own, such as Azyrava (Védiazyrava) the Mistress, sometimes the daughter, sometimes the wife of Chkaï, and likewise the partner of his locum tenens. The progeny of Azyrava is numerous, and in many cases their character is the same as that of the children and grandchildren of Chkaï and Angué-Patiaï as described before. We find among them the goddess of the household (Jourtazyrava), the goddess of the stable (Koudazyrava), of the bath, the forests, the water, and rain, &c. There is some confusion, however, in their case, for the

goddess of the water and the rain is called Védiazyrava, and this, as we know, is only another name of Azyrava, the mother.

Védiava and the Egg.

This Védiava [or Védiazyrava [1]] has a history. Once when Chkaï, awaking from slumber, stepped on an egg and broke it, a beautiful woman rose from it and declared she was his daughter. Chkaï, however, declared she was his wife, and so she was. She is the same as Angué-Patiaï, the Divine mother and goddess of the water, and it is she who in sending down rain sends fecundity also to the Mordvine women (p. 108).

This story is in many respects like the story told in the Brâhma*n*as of Manu and his daughter and wife I*d*â. All such stories have most likely the same origin, suggested by the fact that the earth may be considered as created by the god of heaven, and at the same time as owing her fertility to the light of the sun and the rain of the sky.

Being the god of light, Chkaï, like his congeners in other mythologies, becomes a guide in darkness, in troubles and dangers, and likewise, in a moral sense, a guide and help in distinguishing darkness and light, that is, good and evil. Thus we read (p. 49) :—

'High god, great god, who sustainest us, defend us everywhere in our troubles. Guard us against misfortunes and pain, against annoying adventures, against evil conflicts, against the evil eye, against any mischievous person or evil-doer.

[1] Azyrava means mistress (p. 114); 'Védiazyrava n'est autre qu'Angué-Patiaï' (p. 139).

Against the last, shield us thyself. Stretch forth thy hand, raise up the skirt of thy robe and cover us and make a hedge for our defence.'

And again (p. 50):—

'Most high god, most great god, who sustains us, guard us thyself when we are on the road, when we rise, when we lie down, when we rest by day or sleep by night, god of the evening and the morning, guard us by the light of the sun and the moon against every man of evil thought, against the wretch who means mischief; guard us against a wrong step, against a bad adventure; in good health, lead us back to our house and have us in thy keeping. We pray to you, fathers, mothers, ancestors, relations, male and female, who are in the holy world, pray to God the most holy, because we invoke your names.'

As the god of spiritual light Chkaï is invoked by the following prayer:—

'O great Chkaï, high Chkaï, here is a round loaf and a round egg for thee!

'Enlighten our sons! Enlighten their eyes that they may see the good and the evil! Help that their life may be bright, that their hearts may be warm towards their wives, and the hearts of their wives warm towards them,' &c.

We saw Védiava or Védiazyrava invoked before as the wife of Chkaï. Is she the same as Vedava (p. 16), the mother of the sun and the goddess of the water? She is asked to send water on the earth and to make the seeds grow everywhere. Her name is sometimes spelt Vedazyrava, and under that name, supposing it is the same, she is invoked to bestow offspring on the people. Under the same name we find her once more in a prayer to be recited at the birth of a child (p. 32): 'Vedazyrava,

goddess of the water . . . Angué-Patiaï, divine mother, thou who once drewest forth thy children like sparks from a stone, help us that this child may be born quickly!'

Whatever this goddess may have been meant for, whether for the goddess of the fertile earth, or for the goddess that bestows fertility on the earth, a kind of Dêmêter, there can be no doubt about the original nature of other gods and goddesses, because they are still invoked as what they were originally. Thus Viriazyrava, the sister of Védiazyrava, is the goddess of the woods, and there are besides the god of the beech-trees, Kélou-paz or Kélou-ozaïs, the god of the oak-trees, Toumo-ozaïs, and the god of the lime-trees, Pekché-ozaïs. There is Jourtazyrava, the goddess of the house or of the ingle-nook. When a child is born, a prayer is addressed to her (p. 54): 'Goddess of the house, let this new-born child live long and happy!' And, 'May thy days be as long as this pillar, and the ring of thy body and thy soul be as firm as the stone (of the oven).'

Pourgas and Syriava.

There is another god Pourgas or Pourguiné-Paz, whose nature is more difficult to determine. He is invoked in a popular story (p. 43) to deliver Syriava, and is connected there with lightning, while in another place (p. 135) he is implored not to frighten his worshippers by his thunder, so that we can hardly be far wrong in recognising in him a kind of Mordvinian Indra. As to Syriava, she may or may not be identical with Syria, or Syrja, who was carried off by Pourgas to be his wife (p. 115).

Kardan-siarhka.

There is a more mysterious god, called Kardan-siarhka or Kardas-siarko. His name is said to mean 'Hole of the Stable,' and there used to be formerly in every house a small hole covered with a stone into which some sacred food (oz-ondampal) was placed. Sometimes this small god is supposed to dwell with Iourtava in the ingle-nook, sometimes under the threshold, so that we cannot be very far wrong in looking upon him as a kind of house-god or lar or Vâstoshpati.

At the end of a prayer addressed to various deities we read (p. 23): 'Honour to every day, and let us glorify every day Iourtava, the goddess of the house, and let us give oz-ondampal to Kardan-siarhka; he is small, but he does much, and without him we should be as without a head.' If the Mordvines go into a new house, they always invoke this Kardan-siarhka. 'Protector of the hearth!' they say, 'a new home has been prepared for thee, get ready and come with us to the new home, and do thy work there. Here in thy old place, where all is empty, thou hast nothing more to do.' Some anthropologists might possibly see in this stone and the hole a kind of fetish, but there seems to me a deeper meaning in it which cannot be disposed of by a mere technical term.

Hitherto all that we have been told about the mythology and religion of the Mordvines has been quite in harmony with what, according to our theory of the origin of mythology, we should have expected. The few names preserved to us are clearly the names of the agents behind the salient phenomena

of nature, in some cases quite intelligible, in others easily restored to their original meaning. Heaven, sun, earth, water, clouds, and thunderstorms are the theme of which Mordvine mythology is one variation, just as Vedic mythology is another, only that the latter has had the good fortune of being preserved in greater completeness. Even the fact that some of the ancient Mordvine prayers were preserved orally, but in such a state that, though repeated, they could no longer be understood, may be matched by some hymns of the Rig-veda which, though they sound all right, nevertheless defy all grammatical explanation.

Syria, the Dawn.

It is curious that the only goddess who has become the object of a romantic legend is the goddess of the Dawn, who, as we know, takes so prominent a position in the romantic mythology of India and Greece.

The name of the Dawn is Syria, and we are told that she remained unmarried for many years, till at last she was carried off by a dark man, a stranger, who was seen after a thunderstorm walking about in the street, looking around with his eyes that were shining like sparks. He demanded Syria from her father, but after having received her, he behaved very boisterously at the wedding-feast, and when departing with his bride he shouted like thunder, his eyes shone like lightning, and the whole house was set on fire. People then discovered that the bridegroom was no other than Pourgas.

What is strange is that here the god who carries off the Dawn is not a solar deity in the strict

sense of the word, but a kind of Indra, the god of the blue sky, but also of the thunderstorm, who rescues the light from the darkness of the clouds. How deeply this legend entered into the ordinary phraseology of the people is shown by the fact that Pourgas by his marriage with a Mordvinian girl is supposed to have become a connection of the people at large. When, therefore, thunder and lightning become very terrible, the people exclaim, 'Gently, gently, for thou art one of ourselves.'

What is most curious, however, about this Mordvinian mythology is that there should have been, as if built up on this lower stratum, a much higher edifice of philosophical speculation which at first sight would seem far beyond the capacities of such people as the Mordvines are now, and are known to have been for the last three hundred years. Whether this should be explained by admitting a class of more highly gifted individuals among the Mordvinian shepherds, or by foreign influences, the traces of which are clearly perceptible in some of the names of their gods, whether Mohammedan, Persian, or even Indian, is difficult to say. Mere analogies will not help us much, otherwise we might refer once more to the South Sea Islands, where we find by the side of the most uncouth myths and legends, some purely metaphysical speculations, such as divine beings called, 'The Root of all existence,' 'The very Beginning,' 'Breathing,' 'Life,' 'the Great Mother[1],' &c. We might also appeal to the Veda itself, where we have a number of hymns, full of the commonest

[1] See W. W. Gill, Myths and Songs from the South Pacific, p. 2.

and most childish conceptions, side by side with other hymns, passages of the Brâhmanas and Upanishads, containing speculations of extreme metaphysical subtlety.

Mordvinian Philosophy and Religion.

The Mordvinian speculations on the creation of the world, and still more on the government of the world and the conflict between good and evil, are so full of interest that, though they are not mythological in the strict sense of the word, I shall mention a few of them in this place as showing the easy transition from what many would call the ridiculous to the sublime.

This is what Mainof learnt from the Mordvines, the same Mordvines who deposited bits of food in the hole in the stable :—

'In the beginning,' they said, 'there was nothing [1]. Chkaï alone, as the Mokshanes, or Tchim-Paz, as the Erzjanes call him, existed in the world. He was

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[1] One of the Vedic hymns begins, 'There was then not nothing, nor was there anything.' In the Edda we read :—

'There was an age when there was nothing,
Nor sea nor sand, nor briny waves,
There was no earth, nor heaven above,
Gaping abyss, and grass nowhere.'

And again :—

'The earth was shaped from Ymir's flesh,
The sea from his sweat,
The mountain from his bones, the trees from his hair,
The sky from his skull,
And kindly Asen made from his eyebrows
Midgard for the sons of man,
But from Ymir's brain
The hardy clouds were shaped.'

Edda, übers. von K. Simrock, pp. 279, 281.

and he was not, for no one had ever seen him. He felt tired being always alone. He sighed [1] and his sigh became the wind, he gnashed his teeth and winked with his eye and thus produced thunder and lightning. He could not walk about because he was everywhere [2], and there was no one for him to talk to. No one has ever known how Chkaï appeared in the world, for he was before the world, having neither beginning nor end. The earth, the sky, the stars, the gods, men, animals, and even evil spirits exist through him and obey him. He is the invisible creator of the world, and he rules with the help of invisible deities, who are his servants.

'Hence all prayers begin with an address to him, and after that only, to the other gods. Chkaï is kindness itself, he loves all he has created, and wishes that the whole world should be happy. He is omnipotent, and yet he is unable to do any wrong, for any wrong done by him would at once turn to good. Once being angry with a Mordvinian, he burnt his house, but when the man came to cart the cinders away he found six barrels full of gold pieces. Thus Chkaï's punishments always turn to blessings.

'But in order that people should be reminded to lead a virtuous life, Chkaï allowed Chaïtan to create a number of evil spirits, and whenever a man commits a sin, Chkaï allows Chaïtan to punish him. But as soon as the sinner repents, Chkaï comes back to him and sends away the evil spirit. Sometimes, however, these evil spirits attack even innocent people, and therefore on passing swamps and other dangerous places one should always pray, "Chkaï, shepherd of men, be our guardian."'

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[1] Cf. Brihadâra*n*yaka I, 1. When the sacrificial horse shakes itself, it lightens, when it kicks, it thunders, when it makes water, it rains, voice is its voice.

[2] More speculative than when, in Genesis iii. 7, the Lord is spoken of as walking in the garden in the cool of the day.

Chaïtan or Satan.

Now here we see clearly the inroad of Mohammedan ideas. It cannot be a mere accident that Chaïtan should be with the Mordvines the name of the evil spirit. It is evidently the Arabic word Shaitan, the Hebrew Satan, 'he who opposes.' The Mordvines call their own evil spirit Korych [1], that is, Owl. It would seem, therefore, as if they had known no evil spirits beyond birds of ill-omen before they became acquainted with Chaïtan, that they believed in one omnipotent and omnipresent God only, and that when they heard from their Mohammedan neighbours about the Devil, they adopted the name and arranged a place for Chaïtan as well as they could. Chkaï was then supposed to have created Chaïtan as his first companion. Another indication of the high position which Chkaï held in the eyes of the Mordvines is that one branch of them, the Erzjanes, allow of no sacrifices for Chkaï, while the other branch, the Mokshanes, have many festivities in his honour. It is the same with Brahman in India. The Supreme Brahman (neut.) has no temples; temples which are dedicated to Brahman are meant for Brahman (masc.).

Creation of the World.

There is another account current of the creation of the world and of Chaïtan which deserves to be mentioned. Tchim-paz or Chkaï was alone floating over the surface of the waters. He spat on the

[1] They also call him Chimarloa and Simargla, a bird who is for ever sitting on the celestial apple-tree. Could this be a corruption of the Persian Simurgh?

water and the spittle grew into a mountain. He struck the mountain with his stick and Chaïtan stepped out and said: 'Make me thy brother!' Chkaï replied, 'Be my comrade, but not my brother, and let us now create the world together.' He then ordered Chaïtan to plunge into the sea and to fetch some grains of sand. After some tricks played by Chaïtan, he at last brought up the sand, but kept some of it in his mouth. When Chkaï had thrown the sand upon the water, it grew into the earth, while the sand in Chaïtan's mouth swelled so rapidly that he had to spit it out. This caused the mountains, the valleys, the precipices, and all the unevenness of the earth[1] (p. 117). Then Chaïtan was cursed by Chkaï and thrown into hell, where he remains from age to age.

What is curious in this account is the recognition of the once stratified earth being disturbed and disrupted by Chaïtan, as representing the fire under the earth, and the still deeper thought that whatever mischief Chaïtan may do, it must always turn to good in the end. Another legend relates that even Chaïtan will in the end be pardoned, that Chkaï and Chaïtan will be reconciled, and that then the Mordvines will be happy. Other authorities, however, deny the possibility of a reconciliation between good and evil, and represent Chaïtan as for ever imprisoned in the Ermak-kov, the mountain of money in the Ural mountains.

When there is an eclipse people say that the

[1] The same story, as Krek assures us in his Einleitung in die Slavische Literaturgeschichte, p. 278, forms the common belief among the Old-believers (Altgläubige) in Russia to the present day, in preference to that of the O. T.

people of Chaïtan surround Chkaï so that they may play their tricks unobserved (p. 136). Shooting stars are called the serpent of fire (p. 136). There is considerable variety in these legends about the creation of the world and the constant fight between Chkaï and Chaïtan. Exactly as in the Avesta, whatever good Chkaï does, Chaïtan tries to injure it. When Chkaï had created the clear sky, Chaïtan covered it with dark clouds. Then Chkaï filled them with water and they fertilised the soil. Then Chaïtan stole the keys of the clouds from Védiazy-rava, and opened the sluices, causing a perfect deluge. But Chkaï turned the deluge into rivers which proved a benefit to mankind. Then Chaïtan blew on the waters so that people were nearly drowned. But Chkaï gave them boats, oars, and sails, and thus once more brought good out of evil.

Creation of Man.

When Chkaï had formed man from potter's clay, he created his soul and confided it to a dog to protect it against Chaïtan. Dogs had no hair then, and when Chaïtan had sent a severe frost the dog, nearly dying of cold, showed Chaïtan the soul which Chkaï had made. Chaïtan then spat on it and thus infected the soul of man with all the diseases to which he is heir. The dog was punished with having to wear the offensive fur of Chaïtan, and hence the expression, 'This smells of dog.' Then Chkaï breathed a soul into man, and man became subject to all the evils with which Chaïtan had infected the soul. All that Chkaï could do to help him was to teach him the difference between good and evil. According to another account, the first

idea of creating man came from Chaïtan. But though he collected clay and sand from seventy-seven different countries, he did not succeed. His figures were like swine, like dogs, like reptiles. Instead of speaking they growled or barked. Then he sent a bat up to the sky to build her nest in the towel of Chkaï, that is, the Milky Way. When the nest fell down, Chaïtan could reach the towel, and by wiping his men with it they assumed a divine form. Then followed a new struggle between Chkaï and Chaïtan, and they agreed at last that Chaïtan should have the body, but Chkaï would retain the form and the soul of man. Thus while the human soul is in the body, Chaïtan has command over it, but after death the soul in its divine form returns by the towel of Chkaï (the Milky Way) to the Creator, while the body falls to dust. The bat, of course, is punished by losing its wings and having a tail like that of Chaïtan.

After Chkaï had created a woman to be a companion to man, Chaïtan corrupted her in every possible way. Still at first there was a time of peace and happiness on earth, and Nichké-Paz himself came down to act as ruler. But Chaïtan persuaded an old man to plant the hop, a plant which rapidly spread everywhere, and when made into beer caused drunkenness and every kind of misery among the people. Then there was a rebellion against Nichké-Paz. He was no longer believed to be the son of God, but when he had been illtreated and killed, he flew up to heaven, and people then perceived who he had been. After his disappearance the light of the sun was diminished, and every kind of evil fell upon the earth. Then

Chkaï advised the people to have kings, princes, judges, and leaders, and their first Tsar was called Tchouvan, the proud. The last who conquered the Mordvines was a stranger called Indji, who came from beyond the Volga and tatarised the whole country.

It is impossible not to recognise in this accumulation of legends traces of foreign influences, ancient and modern. The fight between good and evil is so like that of Ormazd and Ahriman, that it is difficult to believe that it could have come from anywhere but Persia. The Buga or Boa of the Tunguses may be the Persian Bhaga or the Russian Bog', and the seven Kudais of certain Turkish tribes remind us of the Persian Khodâi, god, Zend quadhâta, and the seven Amshaspands. The name of Charmazd occurs as a name of Chkaï, and among the Mongolians also Tegni (the same as Tengri ?), the divine father of their Tschingis-chan, is called Chormusda [1]. This can hardly be a mere accident, and considering the striking similarities between the Mordvine speculations on the creation of the world and of man, and those of the Vedic Brâhma*n*as, even the name of Indji as that of the conqueror of the Mordvines, may not be purely fortuitous. On all these points, however, we must wait for further information from the learned members of the Finno-Ugrian Society. I am quite aware of the risk I have been running in throwing out these guesses, and I am quite ready also to bear the blame, if only others, better qualified than myself, will carry on this line of research and give us in time a more perfect outline of Mordvinian

[1] Castrén, Ethnologische Vorlesungen, p. 49.

mythology, and a more satisfactory explanation of its various sources.

Foreign Influences.

The difficulty at present is that in the legends which are gathered on the surface we cannot tell which are ancient and which are modern, or even quite modern. That there are Christian influences in some of them cannot be doubted, even Russian influences are clear enough. Thus from a mere similarity of sound, Nichké-Paz, the first ruler of men and the son of Chkaï, has been mixed up with St. Nicolas, and we find prayers beginning with, 'O gracious Nichké-Paz Nicolas, protect us like a good bee-hive, preserve the bees!' (pp. 124, 126). Jewish influences may possibly be detected in the prohibition of pork, which, however, was explained by a legend according to which a pig had once saved the life of a son of Chkaï and Vériava (p. 127). After a time, however, this prohibition was abolished, and Chkaï then imparted the most delicate taste to pork. There is even a god of swine called Tavun-ozaïs (p. 127). Such invocations also as 'Tchim-Paz, God Sabaoth' (p. 15), must have come from a Jewish, or possibly from a Christian source. If then we remove whatever seems foreign to the pagan mythology of the Mordvinians, it is clear that we find it exactly what we expected, the principal phenomena of nature are represented by agents who bear their names, and these agents, or gods, are invoked to grant what is in their special power to grant; though in the end they are supposed to be able to grant every kind of blessing, and are conceived as omnipotent, omnipresent, and as full of

love for human beings. The speculations on the struggle between good and evil, between Chkaï and Chaïtan, may be of more recent date, possibly borrowed from outside, but the position of Chkaï as the supreme God, as something above all other gods, may well have been the result of a spontaneous development of mythological thought which in other countries also ascends from the individual agents of nature to a supreme god of nature, a god above all gods, and in the end leads to the realisation of God in his absolute character. I do not think that we found these steps in the mythology and religion of the Mordvines simply because we looked for them. We no doubt looked for them from a priori reasons, but we found what we wanted because it was there, not because we put it there. It is true the materials on which we had to work are as yet very imperfect, though far more perfect than in the case of mere illiterate savages, and they have to be used with extreme caution; but in one respect there is also an advantage, for it is this very imperfection, this want of system, both in the minds of the Mordvines themselves, and in the minds of their observers, which enables us to see the mythological process in its spontaneous and unchecked advance from the lowest to the highest stage.

Finnish Mythology.

It would be of very great importance if the members of the Finno-Ugrian Society would give us some more contributions on the mythology of the Finno-Ugrian tribes scattered over Asia and Europe. These tribes, whom Castrén comprises under the name of Altaic, others of Ural-Altaic, form

five classes[1], (1) the Finnic or Finno-Ugric, (2) the Samoyedic, (3) the Turkic, (4) the Mongolic, (5) the Tungusic. The Ugro-Finnic class, to which the Mordvines belong, is divided again into four branches, (1) the Ugric (Ostjakes, Woguls, and Ungars), (2) the Bulgaric (Tcheremisses and Mordvines), (3) the Permic (Permians, Syryanes, and Wotyakes), (4) the Finnic (Fins, Ests, Laps, Kareles, Lives, and Wotes). Among all these races, each possessing its own dialect and its own mythology, the language and mythology of the Fins have received the most exhaustive and the most scholarlike treatment. The mythology of the Fins deserves therefore our special attention, as it may help us to see whether it likewise confirms the a priori theory with which we approached the Mordvinian mythology, and by which we shall have in the end to test the mythologies of the Aryan peoples, more particularly that of the Vedic Brâhmans and that of the Greeks and Romans.

In working our way through the mythology of the Fins we have two great advantages, that of safe and truly scholarly guides, and that of trustworthy materials. But we have to contend with a disadvantage also. These trustworthy materials, I mean the literary documents of Finnish mythology, represent mythological thought at a much later stage than the Mordvinian prayers, whatever their relative dates may be. The mythology of the Fins has passed through the process of literary culture, like that of the Greeks in the Homeric poems. It is no longer in its natural, home-grown, unsystematised

[1] See M. M., Natural Religion, p. 328 seq.

state, but has been worked up into a cycle of poetry, no longer with the exclusive object of relating what the people believed, but with the view to please an audience. The poet knows that a popular audience wished for amusement rather than for instruction or edification, and it is easy to see that the poets whose songs we possess in the famous Finnish epic poem, the Kalevala, allowed themselves great liberty in embellishing their story, in order to raise the character of their heroes to the level of a new generation. Finnish mythology is no longer so transparent as that of the Mordvines, its names are often quite unintelligible, and yield little meaning even under the scalpel of so well-informed and careful a scholar as Castrén. Still, in the end, I think we shall see that the a priori theory with which we started fits the mythology of Finland also, just as it fitted that of the Mordvines, nay, may be shown hereafter to fit likewise the ancient mythologies of India, Greece, and Italy.

Castrén.

It is important to observe that Castrén, who is the highest authority on Finnish mythology, and who had no mythological theory of his own to defend, divides the Finnish deities at once into four classes, (1) gods of the air and the sky, (2) gods of the waters, (3) gods of the earth, (4) gods below the earth. We shall see that Yâska, whose work could hardly have been known to Castrén, adopts a very similar division, dividing the gods of the Vedic mythology into gods of the sky, gods of the air, and gods of the earth. Considering that Yâska also had no mythological theory to defend, and that he wrote

probably four hundred years B. C., the coincidence is valuable as showing how self-evident the physical character of the ancient deities must have been to every unprejudiced student.

Castrén's work in reconstructing the ancient Finnish deities is a marvel of industry and ingenuity. It reminds one of the work of Charles Newton and his assistants in putting together the broken stones of the statue of Mausolus.

There was at first a heap of broken marble lying in the British Museum, many hundreds of fragments, and these were put together with so much skill that we have now the colossal statue of the Carian king, the most perfect portrait statue, exactly as it was when put up by his widow, Artemisia.

Jumala.

The first image which Castrén's ingenuity has restored is that of Jumala, a name which, though originally that of an individual deity, is used in the plural also, having assumed the meaning of god in general, just as Maru, a corruption of Marut, the storm-god in the Veda, is used by the Buddhists as synonymous with deva. Similar cases of the gods of the storm becoming the principal gods, or lending their name to express the idea of god in general, may be seen in the first volume of my Gifford Lectures, 'Physical Religion,' p. 310 seq.

When Jumala is invoked as an individual deity, he is called almighty, blessed, gracious, and holy, epithets which are supposed by Castrén to show Christian influences. That such influences have found their way into the mythology of the Fins, as we possess it, cannot be doubted, but it is well

known by this time that such epithets, as well as the name of Creator (luoja), are likewise found where no such influence could be thought of. That Jumala himself is of purely Ugrian descent can best be shown by the fact that he is known, not by the Fins only, but likewise by Laps, Ests, Syryanes, Tcheremisses, and even Samoyedes [1].

Euhemerists have not been wanting who maintained that Jumi, or Jumo, was a man, the ancestor of Fins and Laps, and that he was worshipped after his death as Jumala. Lönnrot, however, saw at once that Jumala comes from the same stem as jumu or jumaus, thunder. Castrén shows that la is a local suffix, and that the stem was jum, a word which the Samoyedes used for god, but which they now pronounce num, meaning both sky and god.

Num.

This word meant originally sky, and is another proof, if such proof were wanted, of the almost inevitable worship of the sky among primitive races, though not simply as the blue tent with sun, moon, and stars, but as some active power, endowed with volition and power to act behind the blue tent, and manifested in his acts, whether thunder, lightning, rain, snow, hail, or wind, but chiefly light. Num, however, betrays a still earlier meaning than sky, namely that of thunder. In the dialect of the Kamasses, it is the regular word for thunder. It would seem, therefore that while the Âryas in the south called the sky the brilliant, dyaus, the Ugrians in the North called it the thundering. Juma-la

[1] Castrén, Finnische Mythologie, p. 11.

meant the place where Juma is, the place where thunder is, that is the sky, though not confined to this one manifestation by thunder, but including other manifestations such as light, storm, rain, snow, and all the rest. From meaning sky, Jumala came to mean he of the sky, and when used in the plural, it became a predicate, meaning heavenly, divine; nay, in the end it was used like Deus, as the word for God. Thus Castrén tells us that when he asked an old Samoyede sailor where Num dwelt, he pointed to the infinite expanse of the ocean, as for the time the abode of Num.

When there is a thunderstorm, the Samoyedes say there is a row with Num, meaning that there is thunder in the sky. Jumala has in fact passed through exactly the same stages of growth as tien in Chinese, tengri in Turkish, chkai (skai) in Mordvinian, all meaning, as Kowalewsky shows, 'ciel, génie du ciel, divinité,' and sometimes 'esprits bons et mauvais.'

In this way, thanks to the researches of Lönnrot and Castrén, Jumala has been recovered as the oldest god of the Fins and their cognate tribes. But, as Castrén remarks, the savage in his gropings after the Infinite (p. 25) is not satisfied with one object of worship, such as the sky; 'he discovers the presence of more than human powers and of more than human agents in many other places, in the foaming waves of the sea, in the devouring flames of fire, in the earth, with its high mountains, its dark forests and its wild beasts; he finds names for them, nay, he soon feels himself dependent on them.'

We can hardly doubt that all these superhuman agents had originally names assigned to them,

expressive of the objects through which they were manifested, while names of a more general character, such as lord, ruler, creator, were given at a later period to one or all of their gods.

Ukko.

It is curious, therefore, that the god who was formerly considered the highest and the oldest god of the Fins should be called by the name of Ukko, which means old, venerable, father, and that this word should occur as a divine title of other gods, very much like Seigneur, i.e. senior. We have Veen Ukko, Ukko of the water, Kummun Ukko, Ukko of the hills, Tuonelan Ukko, Ukko of death. Corresponding to Ukko, father, there is also Akka, or Eukko, mother, as in Mannun Eukko, Mother of the Earth, &c. When we meet with such a name as Taivahan Ukko, Father of the Sky, this might be meant for Jumala, as well as for Ukko. And yet Ukko by itself seems generally to be the name of a separate god, a god different from Jumala.

This Ukko, the old one, dwells in a cloud, in the centre or navel of the sky; he has to recover sun and moon when they have been carried off, he is well armed, wears a fiery shirt, sometimes a fur (evidently the cloud as monstrum villosum); the rainbow is called the bow of Ukko, and lightning is his sword.

He is in fact the god of the sky more particularly in his active or fighting capacity, and so far distinct from Jumala. Names such as thunderer, neighbour of the thunder-cloud, lord of the roaring cloud, speaker in the clouds, are often given to Ukko, and in modern Finnish ukko is used as the word for

thunderstorm. We can well understand why Ukko was supposed to give fertility to the fields, and to stir up the waves of the sea. Beginning with the thunderstorm as his proper domain, his power extended from the air to the earth and the sea, till at last he was invoked for almost everything—even for assisting at the birth of children.

Vanna-issa.

Among the Ests, Ukko is best known under the name of Vanna-issa, and is actually raised to the rank of creator.

We see, therefore, quite clearly that, though Ukko had much the same origin as Jupiter tonans, his original name must have been specially connected with thunder and lightning. That name, however, if it ever existed, has been supplanted by that of Father, as if instead of Jupiter we had in Latin Pater only as the name of the Fulminator. In one sense it may be said that Ukko and Jumala are but different names for the same power or agent. Still, there is much in a name, particularly with mythological beings, and there evidently is a difference between the spheres in which either of them was supposed to act till they both rose to the position of a supreme god.

Minor Deities.

Different from these supreme gods are a number of local deities, each maintaining a certain independence, and little interfered with by either Jumala or Ukko. Each of these deities is master in his own house, selbstschaltender Hauswirth, as Castrén expresses it, thus describing in other words what

I called Henotheism in the Veda. Castrén remarks, 'though Ukko resides in the sky, the sun, the moon, and the stars go their own way and are invoked as independent powers, very different in that respect from the Olympian gods, who are all subject to Zeus.'

Some ancient authorities assure us that the Finno-Ugrian races, in worshipping the sun, the moon, and the stars, worshipped in reality the visible, though inanimate heavenly bodies. But this seems more than doubtful, because the very act of worshipping would have changed their inanimate into animate bodies. As soon as the ancient people said 'Dear Sky,' or φίλε Ζεῦ, the sky had ceased to be a mere tent. For it is chiefly as active, as doing either good or evil to men, that the sky could acquire any interest. As soon as the sky had been recognised as the giver of light and warmth, as the author of growth and of life, or in his character as Day, nay as life itself, it was possible to address not it, but him or her, as a bestower of benefits such as no mere mortal could bestow.

Particularly when, as in Sanskrit, such a name as dyaus could be used both for the sky, and the light, and the day (dyávi dyavi, day by day), the mythological metamorphosis became as inevitable as it is even with modern poets. 'The days are ever divine,' Emerson writes, 'as to the first Aryans. They are of the least pretension, and of the greatest capacity, of anything that exists, they come and go like muffled and veiled figures; but they say nothing; and if we do not use the gifts they bring, they carry them as silently away.' Why should we wonder then if the ancients spoke of each Dawn as

the luck of the day, as shaping the future[1], or if the German proverb says 'Morgenstunde hat Gold im Munde'?

The principal representatives of the more localised phenomena of nature in the Finnish pantheon are Päivä, Kuu, Otava, Tähti, that is, the sun, the moon, the great bear, the star (sometimes the pole-star).

We find among those who describe the worship of these heavenly bodies the same difference of opinion, or rather the same vagueness of statement, which we find in Greece, in India, and almost everywhere where a similar worship exists. Some authorities assert that the people worship the actual visible bodies, others deny it, the fact being that here, as everywhere else, different classes of the people express themselves in different ways. It should be remembered, however, that as soon as the Sun was invoked, praised, and worshipped, it could no longer have been looked upon as a mere ball of glowing fire or heated metal; it must have been conceived as something that can listen, that can be pleased, honoured, and persuaded, as something human, and soon superhuman. There is no doubt the same danger of mistaking the visible sun for the invisible agent, as there is in mistaking the eidolon, the image, for that of which it is the image, but as a rule we are quite safe in saying that, whether among the Fins, or among the Ests, the Mongolians, the Tunguses, the Tatars, the Ostjakes and Woguls, wherever sun, moon, or certain stars are worshipped

[1] Mahyam bhavyam vidushî kalpayâte, 'May the knowing Dawn shape the future for me.' See Weber, Portenta, p. 364.

and honoured by sacrifices, not the heavenly bodies themselves, but the agents behind them or within them are intended, nay, that among many of them the worship of the sun or of the sky has led to the worship of a Supreme God, no longer restricted to any of these abodes. The fact that the Fins know of sons and daughters[1] of sun, moon, and stars, nay, of their more or less magnificent abodes (p. 59), would by itself be sufficient to show that they conceived the bearers of these names as more than merely material objects (p. 53).

Children of Sun, Moon, &c.

In some cases these sons of sun, moon, and stars are little more than their parents, only in a more legendary character. In one case, however, the epithet son of the Sun, Päivän poika, is intended for the fire on earth. Fire in its ordinary character is called tuli, but in its divine character Panu. The Fins, like the Vedic poets, recognised in fire something sacred, and if they did not actually worship it, they treated it with great respect, and there is one sentence in Georgi's account of the Tunguses which might have been literally taken from the Rig-veda: 'Whatever sacrifice is offered to the fire is welcomed by the other gods, as if it had been offered to them[2]' (p. 57).

Fire and the sun were often considered as one and the same element, just as in the Vedic ceremonial we saw the sun absorbed in the fire and the fire in the sun.

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[1] The daughters are called Päivätär, Kuutar, Otavatar, and Tähetär.

[2] Cf. Rig-veda I, 1, 4, &c.

All these so-called deities are supposed to be bright and kind and benevolent beings, though sometimes the damage done by the sun to fields and cattle is complained of. They form a class by themselves, between the higher gods on one side and the mere spirits of nature on the other. They do not seem, however, to have received a common name, such as Deva or Asura in Sanskrit.

Eclipses of Moon.

Eclipses of sun and moon, though but rarely alluded to, are ascribed to some horrible powers. In some cases, however, the Kapeet (plural of Kave), who rescue sun and moon from their prison, are also represented as eating the moon (p. 65). This reminds one of the Vedic Pit*ris*; and the very common expression, 'the moon is being eaten,' instead of 'the moon wanes,' shows that such a conception was widely known and accepted.

Koi (Koit), the Dawn.

There is another deity belonging to this class, namely, Koi, the Dawn, who is actually called Jumala in the sense of heavenly or divine. And here we see again how the beautiful apparition of the Dawn has lent itself before all others to a legendary treatment which has almost too delicate touches for a product of a pagan age. Koi, the Dawn (masc.), and Ämmarik, the Gloaming (fem.), are said to have been entrusted by Vanna-issa, the Old Father, with lighting and extinguishing every morning and evening the torch of day. As a reward for their faithful services Vanna-issa would allow them to get married. But they preferred to remain

bride and bridegroom, and Vanna-issa had nothing more to say. He allowed them, however, to meet at midnight during four weeks in summer. At that time Ämmarik hands the dying torch to Koi, who revives it with his breath. Then follows a pressure of the hands and a kiss, and the blushing face of Ämmarik is reflected in the roseate hue of the sky. This legend has been collected, not among the Fins, but among their nearest neighbours, the Ests, and it is just possible that the collector may have allowed himself to embellish the old story, though the story itself is genuine [1].

Luonnotar.

The Fins know of other maidens of the sky, the Luonnottaret of the air, or the lovely maidens of the air. They were the daughters of Ukko, and produced by him by the simple process of rubbing his knees. Another Luonnotar is known as Ilmatar, the daughter of Ilma, the air, but in fact a mere repetition of Ilma, the air, the suffix tar being often used as a personifying suffix, without necessarily implying the relationship of parents and children.

Another Finnish deity belonging to the same class is Uutar (Udutar), or Terhenetär, both names meaning beings of mist or fog. She is represented as having a fine sieve, through which the moisture descends on the earth.

This may supply an explanation of one of the elements in the myth of the Danaides. Though the wind himself is not represented among the

[1] Fählmann, Verhandl. der estnischen Gesellschaft, Bk. i, Heft 3, s. 83 seq.

deities of the air, his daughter is introduced as Tuulen tytär, a kind of Windsbraut, representing the wind. Lastly, the South wind has its representative in Etelätär, from etelä, South, also called Suvetar, from suve, summer, south.

Water Deities.

The water holds a prominent position among the Fins and their neighbours, nor is there anything in nature that points more directly to a supernatural origin, and is more beneficent in its kindness, more terrific in its wrath than the water, whether of the rivulets, the streams, the lakes, the ocean, or the clouds. Many springs and rivers are called holy, and receive sacrificial tributes to the present day. Hence there is a superstition that a river may resent being made into a slave when a new mill is built, just as the Romans thought that the Tiber was offended when chained by a bridge being thrown across. The idea that the actual water was ever invoked and worshipped can hardly be supported by any evidence. Every invocation implies a hearer, every offering a receiver, and that hearer or receiver was the agent, the spirit, or the god of the water, not the water itself, as used for drinking and washing. That agent soon assumed a personal form, such as the gods of the water are generally represented to us, as bearded old men or as beautiful women, living in the water. The deity of the water in general is called Ahti or Ahto in Finnish; Vesi also, the common word for water, may be used instead. It is curious to observe that this Ahto is frequently mixed up with one of the great heroes of the Kalevala, Lemminkäinen, so much so that

Lönnrot proposed to restrict the name of Ahto to the god, and that of Ahti to the hero, while Castrén (p. 73) thinks that the two were originally one and the same person, thus tracing here also epic or heroic characters back to a more primitive mythological stage.

As there is no etymology of Ahti in Finnish, Castrén has proposed to look upon the name as one of many that were borrowed by the Fins from their Aryan neighbours. But when he says that Ahi means sea in Vedic Sanskrit, this is hardly tenable, and the identification of ahi with Old Norse Aegir, or A. S. eagor, must likewise be given up[1]. Ahto's wife is Wellamo, represented as an old woman, but as kind and generous.

The local water-spirits are generally treated as their children and servants. One of them, Pikku mies, is represented as a dwarf, all clad in copper, his shoes made of stone, his helmet solid rock, and he is invoked not only to drive fishes into the net, but likewise to perform acts which require the strength of a giant. Though most of the water-spirits are of a kindly nature, some of them are mischievous and dangerous, particularly Turso or Iku-Turso, the eternal Turso, whose name Castrén derives from the Old Norse Thurs.

Earth Deities.

The next class of deities are connected with the earth. The earth itself is worshipped as a goddess, under the name of Maa-emä, Terra mater. This

[1] Mannhardt formerly recognised the Vedic Ahi in the Old Sax. Agi, Old Norse Oegir (not Aegir), O. H. G. Aki and Uoki, nay even in Ecke and Eckewart; Germ. Mythen, 8, pp. 81, 90, n. 3.

conception of the earth as a mother seems to us natural enough, and yet the conception of the ever-present, ever-visible and tangible soil as a deity, required a greater effort of abstraction than the belief in invisible agents behind the sky or the sea. It would seem that what is trampled under foot is not so easily worshipped as what is looked up to, like the sky, and yet we find in ever so many mythological religions the Earth as the wife of the bright Sky, as in the P*ri*thivî of the Veda, and as in Maa-emä, the wife of Ukko, the thunderer (p. 86) The Earth is of course an Akka (see before, p. 262), and her chief object is to give fertility to the fields, to animals, and to men. There are several minor deities also, assisting Mother Earth in her various functions. Thus Pellervo is the guardian spirit of the ploughed field (pello, gen., pellon is field), Liekkiö, the patron of grass, &c. More important than these are the deities representative of the forest, because the earliest life of the Fins was in the forest rather than in cultivated fields. At the head of the forest spirits, both male and female, stands old Tapio, who has many aliases, such as the old man of the hills, the king of the forests, also the Giver of gifts, the strong God, the great Creator. His wife is Mielikki, who likewise rejoices in many names. They are chiefly implored by hunters, all the wild animals, nay, tame animals also, are their property, honey also and beer are committed to their care.

Haltias.

We see in the large number of forest spirits the beginning of a tendency which in the end produced a new class of beings, representatives of almost every

kind of object, whether animate or inanimate, that could excite the interest of the early inhabitants of Finland. These beings are called haltia, a word generally rendered by genius. The Samoyedes call them Tadebcjos, the Tunguses Bunis, the Mongols Tengris, the Laps Saivas. The etymology of these names, except that of the tengri, is unknown or doubtful. Tadebcjo is connected with tadibea, sorcerer or Shaman, and may have meant the spirits at the beck and call of the sorcerers. The Mongolian name tengri is the same as their name for sky, which became a name for the god of the sky, and lastly, a general name for gods or spirits. The Laps call their spirits Saiva, and speak of them as swiftly moving and as fond of living near lakes (pp. 138, 141). Their name, if like many others of Scandinavian origin, might point to Goth. saivs, sea, possibly to Goth. saivala, soul.

Almost everything had its haltia, that is, almost everything would be addressed as a masculine and feminine instead of a neuter, almost everything could be conceived as an agent, as a facteur. In German the mere fact of addressing anything in nature by herr and frau, produces a haltia; for instance, 'frau erde, frau nachtigall, herr tag[1].' A stone, a house, a tree would have its haltia as soon as it affected the interests of the people, and yet this haltia was not confined to any individual object, but presided over a whole class or genus. It is important to observe that every human individual also had his haltia, just as the Greeks believed every

[1] See Grimm, Deutsche Grammatik, iii, p. 346; Deutsche Mythologie, p. 617.

man to have his daimon, or, as the Romans said, his genius (p. 171).

If a tree dies or is cut down, its haltia remains just the same, and may then almost be explained as the idea or logos, as being in each individual, and yet independent of it. The individual tree, however, soon became the symbol of the haltia, and, as a kind of idol, would receive worship and sacrifice. Places where such worship took place were called Keremet, a word that must be old, considering over how wide an area it is spread, for the Mordvinians also call such places Keraimait [1].

Most of these haltias are kind, but there are also among the spirits of the forest mischievous beings, forest devils, such as Hiisi (plur. Hiidet), sometimes taken as the name of an indigenous race dispossessed by the Fins. Mene Hiiteen means Go to the devil!

Abstract Deities.

There is one more class of semi-divine beings, more intimately connected with human nature, such as Sukkamieli, fem., invoked to kindle love in the heart of men or women, also called Lempo, the god of love. Then there is Uni, the god of sleep; Untamo, the god of dreams; Munnu, who cures eye-complaints; Lemmas, fem., who cures wounds; Suonetar, the goddess of muscles and veins. There are also, just as in Roman mythology, goddesses presiding over the arts of weaving, dyeing, travelling, &c.

Subterrestrial Gods, and Ancestral Spirits.

Closely connected with the terrestrial are the sub-

[1] Journal de la Société Finno-Ougrienne, vol. v, p. 23.

terrestrial gods. It is very difficult to gain an insight into the ideas which uncivilised nations form to themselves of the life to come. That there is such a life is doubted by few of them, and the Fins as well as their neighbours seem to have taken it for granted that the next life would in many respects be the same as the life on earth. Hence they buried many things which the departed cared for in the grave, to be used by him in the next world. Often the presence of the departed was suspected in the howling of the wind, the crackling of the fire, the shivering of the leaves, while the Shamans maintained that they could actually see the spirits with their eyes. Ordinary mortals feel their presence in the qualms of a bad conscience, in distracting dreams, in illness and every kind of suffering. It seems, indeed, as if the spirits of the departed had been very frequently conceived as mischievous, and that much of the respect paid to them arose from a wish to pacify and remove them. Often, as soon as the corpse had left the house, a red-hot stone [1] was thrown after it, so as to bar the return of the departed.

After the funeral, food and other gifts were placed for several years near the grave, in order that the departed might not have to come back to the house for what he wanted.

However, with all the honours paid to the departed, they always formed a class by themselves. Even when they were addressed with divine epithets, and divine honours were paid to them, all that could be said is that they had been raised to the rank of deities, and that they had been admitted to

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[1] See M. M., Funeral Ceremonies of the Brâhmans.

a place among a class of beings to which by birth they had no right. That class, that very concept of deity, had to be elaborated first, and arose, as we saw, from very different materials.

The idea, therefore, that divine honours could have been paid to ancestors, that temples could have been erected for their worship before the concept of deity had been elaborated, involves a hysteron proteron which no historical student of religion can possibly accept.

Of course, when a belief in ancestral spirits had once been started, when it was once allowed that they might return to their homes and cause mischief, or when better motives, such as gratitude and love, had suggested certain forms under which such nobler feelings might best be manifested, ancestral worship would spread very rapidly and widely, and call into existence ever so many classes of good and bad, clean and unclean spirits, whether they were called fathers or ancestors, ghosts or goblins, shades or spectres, fays or banshees, or, as among Finno-Ugrian tribes, Tadebcjo, Männingäiset, Manalaiset, Keijuiset, Kööpelit, Peijot, &c.[1] Castrén suggests various etymologies for these names, nay, he identifies one of them, Kööpelit, with the Greek κόβαλος, Lat. cobalus, Germ. kobold, the Old French gobelin, our own goblin and hob-goblin[2]. He has shown, in fact, a very considerable influx of Scandinavian words and ideas into the language and mythology of the Fins and their neighbours. He thinks that the

[1] Cf. Castrén, l. c., pp. 121–123.

[2] Hob is a corruption of Robin; see Skeat, Etym. Dict. Robin is French for Robert, O. H. G. Hruodperaht.

name Manalaiset indicates that the Fins believed the spirits of the departed to dwell in the earth, whether in their own graves, which is the older view, or in Manala, also called Tuonela, corresponding to the Hades of the Greeks. He also tells us of a ruler of these spirits, who was called Kalma, Tuoni, or Mana. He had a daughter of the name of Kalman-impi, a mischievous spirit. Tuoni means simply death, and is supposed by Castrén to be connected with the Greek Thanatos. This is doubtful. Manala is a contraction of maan-ala (what is beneath the earth), but as it seemed to mean the abode of Mana, Mana was made into a spirit like Tuoni, death, though among the Fins only.

The road to Tuonela, the land of death, led over nine seas and a half; then a river with a fearful waterfall had to be crossed before the dead could reach their resting-place. In some places a boat is mentioned, rowed by a daughter of Tuoni. This place, very much like the Helheim of the Scandinavians, was supposed to be a repetition of the earth with sun, land, water, forests, and meadows, with bears, wolves, and fishes. It was always full of people who were young or old, strong or weak. Everything, however, was dark and solemn there, and the most fearful oath was supposed to be that by the waterfall of the subterranean river (like the Styx). The ruler of the departed and his wife had sons and daughters, black, small, and mischievous, and even more terrible than their parents. Every kind of sickness was at their command, and these very sicknesses were represented as small demons (p. 173).

Castrén's Summing Up.

We could not sum up the wealth of Castrén's observations on the mythology of Finland better than in his own words:—

'In examining the gods of the Fins and of other cognate tribes,' he says, 'we have seen that they all look for the divine in nature, in the clouds of heaven, in the waves of the sea, in the depth of the forest, and in the hidden lap of the earth; in fact, in whatever is great, powerful, and extraordinary in nature.'

That is the very view which I have always defended, and which, in spite of all persiflage, it will be difficult ever to set aside. Castrén thinks that there was a time when the natural objects themselves were accepted as divine, but he is not able to prove this. As soon as we know of names, invocations, and worship, something is meant, as he says himself, which is in nature, but hidden behind the visible objects, though controlling them. If any Samoyedes told Castrén that they worshipped the visible sky, the sun, the moon, the water, and the earth as divine, all we can say is that they knew as little what they said as the Red Indian who says that he worships his totem, or the negro who calls the tail of a tiger his gri-gri (fetish). If they worshipped material objects, phenomena, they could only have worshipped them as the phenomenal part of something non-phenomenal, call it agents, or powers, or spirits, or gods. Castrén himself does not seem to be quite consistent on this point, for he admits in another place (p. 197) that the worshipped objects, though mere trees and stones, are always looked upon as living and personal. This is really

all that I contend for. A thing that is worshipped is ipso facto no longer a mere thing, unless we fall back on the exploded view of fetishism, though even then we must remember that even the lowest fetish was taken for something different from what it seemed to be. Otherwise it would not have been a fetish. It might be said that the Finno-Ugrians also were fetish-worshippers, for some of them carry small stones in their pockets which they look upon small deities (pp. 197, 221).

We have seen throughout the parallelism between the growth of mythology and that of religion among the Fins and among the Vedic *Ri*shis. In naming the phenomena of nature they really created their gods, though as yet in a very rudimentary form. These gods were as yet no more than unknown agents behind the phenomenal world. After a time the something behind the phenomenal, the agents that control the vicissitudes of nature, assumed more and more of a personal and a human character, they became the rulers of the material bodies in which their presence was first suspected, and, rising higher and higher by praise and worship, they became in the end the great deities of the ancient world, the gods of the sky, the air, the earth, the waters, and the lower regions. Smaller objects of nature gave rise to smaller gods, conceived either as independent, as the gods of the forest, the trees, the lakes, the hills, or as subject to the will of the higher gods. Besides these definite beings, there are the spirits of the departed, whether in the air, or in the earth, or under the earth, and the numerous fairies and sprites that owe their existence mostly to poetical imaginations, or to childish superstitions. There is a sharp

distinction, however, between what the ancients meant by gods, θεοί, devas, or whatever else they called them, and spirits, δαίμονες, haltias, tadebcjos, &c. If we speak of spirits we must not suppose that spirit is meant to exclude material bodies. The spirits can generally become visible, audible, strong-smelling, nay, even tangible, and they are therefore decidedly material. Even the spirits of the departed are often supposed to be able to eat and drink.

Castrén.

So much about the Fins and their gods and spirits. Whoever knows the character of Castrén, as a scholar and as a man, feels safe in his hands. He reports carefully and conscientiously, he does not invent, and when he feels doubtful himself, he says so. But he has often to protest against the statements of other authors, particularly against Georgi, who seems to have discovered among the Fins very much what he wished to discover. He ascribed to them a belief in a universal God, the creator of all things, who loves His creatures, knows everything and can do everything, though He has committed the government of the world to inferior deities. And who, before Castrén took up this subject, could have proved that Georgi was wrong? For, after all, he may have carried off this impression from casual conversations with certain people. Suppose that a Finnish traveller were to consult a number of people in England, learned or unlearned, as to what they really believed and disbelieved, what a strange, nay, what an incredible collection of creeds would be the outcome of such an inquisition, however honestly conducted! Castrén, however, totally

denies Georgi's statements, and no one has conversed with more Fins than he has, or lived with them in more familiar intercourse.

'It is true,' he says, 'that most tribes believe in one god, who has his abode in the sky and is identified now and then with the sky, but no one among the Fins knows of him as the creator, which is a purely Christian or Mohammedan idea. Nor is it true that the Fins believe that heavenly god to be careless about the world; on the contrary, he is believed to watch the world constantly, and to interfere most actively in the life of men, by rewarding the good, and punishing the bad, even in this life.'

Here is the weak point in a comparative study of religions which possess no authoritative books. Who is to decide between two travellers that contradict each other? Who is to reconcile their conflicting statements? And what is the result? Such is human nature, that each writer on ancient myths and customs accepts what agrees with his own convictions, without troubling about what seems to tell against them. He cites his authorities, and there is an end, for who is to contradict him or them? I may feel confidence in men like Castrén and Lönnrot, but if Bastholm, Klemm, and others should prefer Georgi, who can prevent them? If anthropologists would only extend the field of their studies, they would find more variety, nay, even contradictions, in the myths and customs of savage tribes than in the etymologies of classical scholars, with this important difference, that scholars can judge of etymologies by themselves, while many a Baron Münchhausen escapes entirely from our cross-examination.

Foreign Influences.

Another real difficulty arises from our inability to distinguish always between what is home-grown and what is imported in the religions of uncivilised races. Castrén has constantly recourse to Teutonic, Iranic, and even Sanskrit words to explain the origin of mythological terms in Finnish and other Finno-Ugrian dialects. We saw before that he looks upon Tuoni, the god of death, as borrowed from the Greek Thánatos. But if so, why should not Manala be borrowed from the Latin Manes, and not from maan-ala? Kudai among the Tatars is clearly the Persian Khodâi, god (Zend, qadhâta, self-made); nor can the Mongolian Chormusda, though it may mean the tutelary god of the earth [1], be separated from Hormasd, i. e. Ahura Mazda, the wise spirit of the Persians. If aimo at the end of several names such as Saiva-aimo, the abode of Saivo, is really the Scandinavian heim in such names as Nifl-heim, Muspel-heim, &c., why should not Saivo be connected with Goth. saiws, sea, and with saiwala, spirit, soul? Why should not Taivas, in Finnish, heaven, be borrowed from Sk. daiva? The Tungusic name for god is Boa (Buga), which may be the Persian Baga, the Vedic Bhaga, the Russian Bog'. Burchan is said to be the Mongolian corruption of Buddha (p. 182); then why should not yzit, the Tatar name of spirits, be the Zend yazata, the Persian yazdâh, the Sk. yagata, worshipful? Even the thunderbolt being called Aijeke vetschera, the hammer of Aijeke or Ukko (p. 47), may be the Zend vazra, club, the Sk. vagra,

[1] He is mentioned as creator also, p. 149.

thunderbolt. All these are, of course, mere guesses, and we must wait till the phonetic system of the Finnish languages has been elaborated with the same accuracy as that of Sanskrit, Greek, and Latin before we can pronounce any positive opinion. But if some of these guesses are right, the very foundation of the mythology of the Finno-Ugrian races would be shaken. However, we must be careful. Coincidences may go very far, and yet, unless we actually find foreign words we may have no right to admit anything like actual borrowing. The similarity between the creation of the world from an egg, as given in the Kalevala and in the *Kh*ândogya-Upanishad is very startling, but who would say that the Fins had borrowed it from the Brâhmans, or the Brâhmans from the Fins?

The Mundane Egg.

In the Kalevala we read:—

> The lower half of the egg
> Shall be the roof of the earth,
> The upper part of the egg,
> Shall become the high sky.
> Whatever is white in the egg
> Shall shine as sun in the sky,
> Whatever is yellow in the egg
> Shall beam sweetly as the moon.
> The other parts of the egg
> Shall become the stars of heaven.

In the *Kh*ândogya-Up. III, 19, 1, we read:—

'The egg broke open. The two halves were one of silver, the other of gold. The silver one became this earth, the golden one the sky; the thick membrane (of the yoke) the mist with the clouds, the small

veins the rivers, the fluid the sea. And what was born from it was the sun.'

How to account for such similarities, which might be pointed out in many other mythologies also, is not easy to say. Anyhow we can see how much there still remains to be done, even after the careful researches of Castrén and his fellow-labourers, and if we must learn to be cautious in using even such scholarlike accounts as that of Castrén of the mythology and religion of the Finno-Ugrian tribes for the purposes of far-reaching comparisons, what shall we say of the descriptions of the religion of the Andaman islanders or the Patagonians, where certain scholars find the key, a real passe-partout, to open the secret drawers of the Vedic or Greek mythology? The main outlines, however, of the mytho-religious system of the Fins, as traced by the hand of so competent a scholar as Castrén, may probably be accepted as trustworthy, and serve therefore as a safe starting-point for an analysis of the mythologies of other nations, the only object for which they have here been mentioned.

The Physical Basis of the Ugro-Finnic Mythologies.

The chief reason, however, why the mythologies of the Mordvines and of the Fins, which we have hitherto examined, possess for us a higher value than the mythologies of Kafirs or Australians, is because they rest on some kind of literary evidence which is far more trustworthy than the observations of travellers who can only tell us of the present state of traditions and customs as seen on the spot.

Of the Mordvines we possess at least prayers and

invocations, of the Fins we possess what may be called an epic poem, as rich in mythological lore as the Iliad or the Odyssey. There are but few mythologies of uncivilised races which can produce such vouchers, and which at the same time have the advantage of not having been reduced to an artificial system by priests or lawyers. It would have been easy to go through several other mythologies, and to show how they grew up from the same psychological soil as the Mordvinian and Finnish. But most of these mythologies are well known, such as the Egyptian and Babylonian, and the Chinese. A reference to the Hibbert Lectures of Le Page Renouf, Sayce, and others will show to any one who has eyes to see and ears willing to listen, the physical framework of these ancient mythologies, and will show more particularly the rampant growth of solar myths on almost every page.

With regard to the so-called Naturvölker, there is no work that for scholarlike accuracy can vie with Waitz, Anthropologie der Naturvölker, and his descriptions of the mythology and religion of the lowest races show almost everywhere the same original worship of physical gods, often followed in later times by a worship of ancestors (vol. v, p. 135). The difficulty would be to find any mythology without that physical background, and we may therefore wait for counter-instances, instead of multiplying our instances beyond what we have done already. What we maintain without fear of contradiction is, that the gods of ancient mythology, whether in India or Persia, in Babylon or Nineveh, in Egypt, among Fins and Laps, among Greeks and Romans, were originally derived from nature, though,

with Waitz, we are ready to admit that when once started the stream of ancient mythology is very rapacious and capacious, and may receive ever so many tributaries from different sources which require a special study and careful analysis.

CHAPTER IV.

PSYCHOLOGICAL SCHOOL OF COMPARATIVE MYTHOLOGY.

Ethno-psychological Studies.

THE preceding pages will have shown, I hope, that I am not and never have been averse to a comparison of Sanskrit, Greek, or Roman mythology with the folklore of less civilised races, provided it be worked out by competent scholars. Such analogies, though they are not intended to prove any genealogical connection between races divided from each other, if not by blood, at least by language, are extremely useful as helping in some cases to explain what seems purely irrational in one myth by what is more intelligible in another. As soon as such researches are carried on in a truly scholarlike spirit, as soon as students prove their honesty by learning at least the languages of these little-known races with something like the thoroughness with which they have learnt the languages of Greeks, Romans, and Hindus, they will open a new and bright period in the study of mythology. Or if they would at least make a critical selection of the authorities on which they rely, and avail themselves of the help of scholars who have mastered the difficulties of Maori, or Hottentot, or Cree, their labours might prove not only amusing, but really helpful. I must confess, it

may be to my shame, that I never care to read anything about the mythologies of savage tribes unless it is written by some one who knows the language. There are so many scholarlike books to be read on Amazulus and Khoi-khois that I never, or very rarely, allow myself the pleasure of studying what others may have written about the works of Callaway, Hahn, Codrington, &c. And this, better than anything else, will explain, though perhaps it cannot excuse, my having hitherto so seldom referred either with approval or disapproval to certain recent works on myths and traditions.

Mythology, as will be found out soon enough, is a very serious and important subject, far too important and far too serious to be played with. It represents a chapter in the history of the Ascent of Man, which contains the key to many of the most perplexing riddles in the growth of the human mind. To say that there is no reason in it would be like saying that there was no organic life in the coal-stratum of our earth. And this development of human reason is surely a subject nearer to our heart than the growth of the crust of the earth, or even the development of living beings, beginning with the Moneres and the Amoeba. It is quite true that a serious treatment of mythology is not so attractive as what has been called Popular Storiology, but it is hardly fair that the successful diggers of coals or diamonds should jeer at the patient hewers of stones, who work for weeks and weeks before they can detach or lift one solid block of granite from the mines of ancient history and tradition.

I have often on former occasions tried to show in what way so-called ethno-psychological or psycho-

logical studies can help us in the study of ancient mythology. It used to be a maxim followed in all comparative studies that if people agreed in what was rational, there was no necessity for admitting any borrowing or any common inheritance. Common sense was enough. But if they agreed in what was irrational, it was presumed that it had been borrowed on one side or the other.

Dr. Gruppe.

A very strong illustration of this principle has lately been given by Dr. Gruppe, who was so much struck by the irrationality of all mythology, if not of all religion, that he thought this extraordinary illusion could only have happened to the human race once, most likely in ancient India, and that all the coincidences between the beliefs of the Brâhmans and those of Greeks, Romans, Teutons, Celts, or Slaves, must therefore be accounted for by actual borrowing or by exportation on well-ascertained intellectual trade-roads from India to all parts of the world; and not, as I hold, by a natural development, as in the case of language.

Without discussing this bold solution of the problem of Aryan mythology, possibly of Aryan language also, we may at all events draw from it this useful lesson that, if the trade-roads of the ancient world should fail, there is nothing left but to fall back on that common psychological stratum which would account for certain coincidences between the mythologies and religions of races, particularly of those who, so far as we know, have never been in historical contact.

If we can discover method in madness, why not in the strange myths and customs of the inhabitants

of the world, or rather in the coincidences between them which have staggered so many ethnologists and psychologists.

Sense of Shame.

It is in this way that, for instance, the sense of shame may be accounted for in its various manifestations in the most distant parts of the world. It has been shown by early ethnologists, such as Bastholm, that the feeling of shame with regard to the nakedness of our body is by no means universal, and that it was a love of ornamentation rather than anything else, which first induced man and woman to use teguments of different kinds. Still, even then the history of the slow development of the sense of shame is a most interesting chapter of ethnic psychology, and deserves to be treated afresh, with all the new information which has been accumulated since Bastholm's time. Here there is a wide field open to ethnological students, provided they will not shrink from hard work, which alone can help them to get beneath the surface, and to gain a real understanding of the strange customs, beliefs, and myths of savage tribes.

Discovery of Motives.

What we most want to know in each case is the motive, for it is well known that people in distant parts of the world often do what seems to be the same thing, but what is not, because the motives were different. The strange custom of the Couvade has been traced in different parts of the world, but hitherto the custom itself has never been thoroughly accounted for. The same applies to the suicide of widows,

which has been proved to have existed not only in India, but in Germany, and among the Scythians. Chamisso mentions in his Travels (ii, 81) that in Fiji also widows killed themselves of their own free will at the funeral of their husbands; while in Tonga this custom is peculiar to one family, that of Tooitonga [1]. But the question is, whether in these different countries the motive was always the same. It may have been a desire to join the husband in another life, a wish to escape from the cruelty of the relatives, or simply a readiness to conform to a sacred custom in order to avoid bringing disgrace on the family. There may have been no motive at all on the part of the victim, but simply the physical force used by the community at large. Unless the motive is the same, the custom is not the same; unless the motive is discovered, the facts themselves are curious, but no more.

Here much has already been achieved by ethnological studies. It was formerly supposed that circumcision was peculiar to the Jews, it is now known to have been a custom in many parts of the world, in Egypt, Arabia, Ethiopia, Kolchis, Phenicia, and Syria. It was spread far and wide by the Mohammedans, and is now found in many of the Polynesian islands. Still, it has never been settled whether this custom arose independently at different times and in different parts of the world, and with different objects, or whether it had but one source and one object, and was communicated from nation to nation like the letters of the Phenician, originally Egyptian, alphabet, or like the Arabic, originally Indian, figures.

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[1] Mariner's Tonga, i, p. 330.

Abstract Ideas among Savages.

There is another subject on which a comparative study of savage and uncivilised races may throw most valuable light.

It seems often to have been taken for granted that uncivilised races are incapable of abstract ideas, and that their conception of gods must be savage, crude, childish, or grotesque. Whether this is true with regard to the postulated primeval savages, whether they were really incapable of abstract thought, we are unable either to assert or to deny. But if, as we are told, we should learn from modern savages what primeval savages must have been like, we shall be surprised to see their extraordinary power of abstraction, and the sublimity of some of their speculations. The people of Mangaia, whom the Rev. W. W. Gill has so well described to us, had evidently never been touched by the rays of any higher civilisation before his arrival. What they possess, they had worked out for themselves, and yet these so-called savages told the first missionary who landed on their shores that the universe was like the hollow of a vast cocoa-nut shell, and that at the bottom of it was a thick stem, tapering to a point, which they call thread-worm. This seems sufficiently childish. But when they represent this point as a spirit without human form, and call it The-root-of-all-existence, and the next stage the Breathing or Life, we are told at once that all this must have come from missionaries, because such abstract ideas are impossible with savages, whether modern or ancient. This is an easy way out of a self-made difficulty, but how can we account for the existence

of the words in this language which convey such a concept as Te-aka-ia-Roê, the root of all existence?

Can such words have been formed without the aid of abstract thought?

If we wish to make the study of savage races really useful we must try to free ourselves from all preconceived ideas, and instead of looking for idols, or for totems and fetishes, learn to accept and to understand what the savages themselves are able to tell us, which is often much or little, according to the way in which we approach them and are able to gain their confidence.

When some years ago I ventured to represent the Perception of the Infinite as the source and origin of all religion, an expression in which, as I am informed, I was anticipated by Ancillon, I encountered a storm of unfounded obloquy. First of all, I was informed that the Infinite could never form the object of perception, because sensuous perception can deal with finite or definite objects only. As if I had not carefully guarded against this very objection by explaining that what I meant by perception, and by sensuous perception, was no more than the pressure which the infinite exercises on our senses and by which it asserts its presence. When our eyes perceive the horizon, i. e. their finis, they perceive, not by reasoning, but by actual sensation, what is at the same time the end of the Finite, and the beginning of the Infinite.

What Wordsworth said of the peak of a Swiss mountain hidden behind the low clouds, that you felt it to be there, though you could not see it, applies with equal force to the Infinite hidden behind the low clouds of finite things.

This actual sensation of a Beyond in all things, whether great or small, seemed to me the true foundation, or the sine quâ non, of religion, because it is the nature of all religion to be transcendental, i. e. to go beyond the limits of the senses. This, if I understood the various religions of the world rightly, was the canvas on which each of them drew the outlines of their gods and heroes, nay, the whole picture of their religion and philosophy.

But here I was informed, again and again, that to assign so abstract a term as the Infinite to the earliest period of the human intellect was an unpardonable anachronism. Did my critics really take me to be so unfamiliar with philosophy and history as to have overlooked this obvious objection? Did they not see that it was my very object to show that this highly abstract term, the Infinite, had, like all abstract terms, its beginning in something very concrete, from which it was slowly developed till it became what it is now with us? If such a term as transcendent began at first with what had marched across the hills, or the sky, was beyond our view, was invisible, though undoubtedly real, why should not the Infinite begin with the desert, or the sea, or the sky? In the perception of these it was actually seen or felt that there was something beyond the visible, and this was what I meant by the Perception of the Infinite. I was told that my definition would include the numerical Infinite also, though that could never lead on to religious concepts. I surely never said it would do so, though the concept of the Eternal may well be said to involve that of numerical and geometrical infinity also. Again, I was told that what I called the Infinite was only the Indefinite, but what

was the distinction between the two was never explained by my eminent critics. However, a little study of the religious belief of Polynesian and Melanesian savages, would easily have convinced the most determined sceptics that these so-called savage, or at all events, uncivilised races, actually possess a concept which comes as near as possible to what I meant by the Infinite, a supernatural force belonging to the region of the unseen, a force in its origin altogether distinct from physical powers, and acting in all kinds of ways for good or for evil. Why this power was, among the Melanesians, called Mana we do not know, we only know its later history and its many applications. Mana (they tell us) may be everywhere : in nature, in man, in words. It is impersonal, and may often be rendered by supernatural or magic power, present in a stone, in an individual, or in formula or charms. A man possesses mana or mana possesses him, but he never is said to be mana. All spirits, and mostly ghosts also, have mana, and every success that is achieved by men is ascribed to mana, in which case the meaning of the word seems often to be no more than luck. But though mana may be at work everywhere, it is itself never seen, it is impersonal, invisible, and unknowable ; it is beyond all that is finite, it is superhuman, it might be called daiva or divine ; it is, in every sense of the word, the Beyond, or the Infinite, the Supernatural or the Divine. It is curious that all persons and things in which this power resides are said to be hot (raka), which reminds one of the original meaning of tapas.

Our ideas of savages and of primitive men are so much the work of imagination only, that they

require constant correction from real facts. These facts, however, should not be taken exclusively from cannibals and half-bestial specimens of humanity, but likewise from races which, though they may be called uncivilised, possess languages that bear witness to considerable mental effort, and concepts embodying the highest abstractions of which the human mind is capable. The idea that there are or that there were any human beings without abstract words, though it has been repeated again and again, can no longer be maintained when we have once learned that no words, except those due to imitation of sound, can possibly have been formed without abstraction [1].

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[1] Hobbes, Computation or Logic, cap. ii. Mill, Logic, book i, chap. 2. Science of Thought, p. 77 seq.

CHAPTER V.

PHONETICS.

Phonetic Rules General and Special.

HAVING thus far endeavoured to vindicate for the Analogical and the Psychological Schools of Comparative Mythology their right to exist, and having shown, as I hope, to our so-called adversaries how welcome their own work has always been to us, if only their materials were collected in a truly scholarlike spirit, I might proceed at once to an exposition of the principles that guide the Genealogical and Linguistic School, and to a comparison of Vedic and Greek myths and traditions as carried out in accordance with its principles. But I have first to make my position quite clear with regard to the conditions under which, in the case of gods and heroes who lend themselves to a material comparison, the comparison of their names should be carried out. It is well known that the ancient gods were very polyonymous, and that their names were liable not only to change, but likewise to extinction. Gods, therefore, may often go back to the same origin and yet appear before us with totally different names. But there can be nothing older in the characteristics of any god than his

name, and hence the great importance of a comparison of names, whenever such comparison is possible.

It is likewise well known that mere similarity of sound is no longer considered a sufficient proof of etymological identity; that, on the contrary, similarity or identity of sound between the names of Vedic and Greek gods would arouse legitimate suspicion. If, for instance, the Old Norse word for Dyaus were Dý-r, instead of Tý-r, if in English we had Dues-day instead of Tuesday, the two words, though more alike phonetically, would be widely distant or irreconcilable etymologically. In the same way, if the word for ten should be decem in English, as in Latin, we should know at once that the two could not be genealogically connected, nay, even if the word for ten in English were zehn, as it is in the spoken High German, we should feel convinced that it was not the old common Aryan word for ten. English words, German words, Latin and Sanskrit words, must all have passed through those phonetic modifications which make them English, German, Latin, or Sanskrit, before they can claim their birthright in any one of these languages.

The question is, Do the phonetic rules which determine the peculiar sounds of Aryan words in each of the Aryan dialects apply with equal force to proper names, more particularly to the names of mythological gods and heroes? This is a question that has often been asked; it was asked many years ago by Benfey, but it has never been boldly answered. Unless we can come to a clear understanding on this point, we should find ourselves impeded at every step we take, we should have to

fight over the etymology of every name, and to defend again and again the principles by which we are guided.

There are certain phonetic rules that are binding on us, whether we treat of nouns, or verbs, or of proper names. These I shall proceed to state at once, and as much as possible in chronological order, that is, as I have watched their discovery during half a century, and have carefully tried to obey them in the progress of my own researches. Afterwards will follow a statement of facts derived from the history of proper names in different languages, showing the difference of their phonetic changes as compared with the changes of appellative nouns, a difference which has hitherto been strangely overlooked, and which deserves a far more comprehensive treatment than I have been able to bestow on it. If facts are facts, whether they support or run counter to generally accepted theories, the facts of the history of proper names ought to carry as much weight as the facts best known to us from the phonetic vicissitudes of nouns and verbs, prepositions and adverbs. If the changes of proper names differ from those of nouns and verbs, it would be useless to shut our eyes and say that this must not be, but that they also have to obey the phonetic laws that regulate the changes of other words. I know, of course, that any deviation from our well-established phonetic rules will at once be put down as license, not as liberty, but as long as our facts cannot be denied, our deductions will have to be accepted. Astronomers do not calculate the orbits of comets like the orbits of other stars, and if they did, their calculations would be useless.

The same kind of uncertainty must be admitted in our attempts at proving the identity of proper names, particularly of the proper names of gods and heroes, as they appear in the Veda, and as they reappear in other Aryan mythologies. This is, no doubt, a difficulty, but it is a difficulty which it is better to face than to blink, particularly when there are other means by which such phonetic uncertainties can be reduced, if not altogether removed.

The Discovery of Phonetic Rules.

Being one of the few scholars left who learnt the elements of Comparative Philology in the lecture-room of Professor Bopp at Berlin, I have lived through almost the whole history of that science, and the various stages which have marked its growth have assumed in my eyes a peculiar, almost a biographical interest. There have, no doubt, been many changes, and on the whole there has been decided progress. How could it be otherwise when we think of the eminent scholars who have carried on the work of Bopp, Grimm, and Pott? But though much has been gained, something also, it sometimes seems to me, has been lost, and complaints have of late been numerous, that the study of language and languages has no longer the same attraction which it possessed in earlier days, and, more particularly, that it exercises no longer the same salutary influence which at one time it exercised on classical studies, on the study of ancient history, mythology, and religion, both in the schools and in the universities of Europe. What is chiefly complained of is that historical, mythological, etymological, and philo-

sophical questions are ordered to stand aside or ruled out of court whenever they conflict or seem to conflict with phonetic observations. The idea that the phonetic rules of to-day could possibly have to yield to the phonetic rules of to-morrow, or to other arguments, is never entertained. Let us take an instance. We are told that sîdati, he sits, is the regular representative of sisadati, changed to sisdati, sizdati, and sîdati. I do not question the possibility of this derivation; I only wish to point out how small the amount of evidence really is which is made to serve as the foundation for what is called a phonetic law, viz. that sd in Sanskrit has to be changed to *z*d, and that after the loss of the *z* the vowel must be lengthened, thus leaving d in the place of sd. The cases quoted as parallel are very few in number, nor are they altogether parallel. The Sanskrit nî*d*a, nidus, nest, which has been quoted as a parallel case, is not quite so. If it is derived from ni + sada, sitting down, we should require a word like nishadá in Sanskrit, having the accent on the last syllable. In this way only could we account for the disappearance of the radical a in shada. And while in nî*d*a the dental d has properly been changed into a lingual *d*, owing to the influence of the linguo-palatal *z* in *ni*z*d*a for nisda, it has not been so changed in sîdati, so that an essential element is wanting to establish a real parallelism. Another parallel case, the Sanskrit pî*d*, to press, has been explained as a contraction of pi-sad for api-sad, to sit on. But here also the d has rightly been changed to *d*, and has not remained unaffected by the *z*, as in sîdati for *sizdati.

It should also be remembered that though the derivation of pîd from pi-sad, and likewise that of πιέζω from πι-σε-σδω, is very plausible, such a compound as pi-sad never occurs in Sanskrit, while in the Rig-veda pi does not occur at all as a preposition with verbal forms.

It would be better, therefore, to wait before ascribing to Sanskrit a phonetic law according to which sisad would necessarily become sizd and sîd, particularly as in Sanskrit sîd-ati may be treated as analogous with such forms as dhîp-s for *di-dbh-s, *dhîdps, from dabh [1].

Restricted Evidence for Phonetic Rules.

I do not say that we ought therefore to reject altogether the derivation of nîḍa or pîḍ, or even of sîdati; I only wish to call attention to the fact that the evidence on which some of our so-called phonetic laws have been founded is very limited, and on account of the inevitable scantiness of our materials cannot be either increased or strengthened. Phonetic laws, or, to use a more modest name, phonetic rules or observations, if once established, must, no doubt, be implicitly obeyed; only we should always try to remember how large or how small the evidence is on which each single phonetic rule has been made to rest. We should also be careful not to reject at once any etymology if it offends against one or the other of our many phonetic rules, particularly if it is otherwise quite satisfactory on material as well as on formal grounds.

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[1] See now an exhaustive paper on si-zd-ô by J. v. Rozwadowski, in Bezzenberger's Beiträge, vol. xxi, p. 147.

Discussions about Θεός.

One of the first lessons I learned in Comparative Philology was the identity of θεός and Sk. deva. It startled me, and seemed to open wide vistas of thought to my mind. No one, at that early, some might say antediluvian time, allowed himself to doubt that both θεός and deus were the same word as deva in Sanskrit. That the word should begin with an aspirate in Greek and with a media in Latin and Sanskrit, that Sk. e (ai) should be represented by Greek and Latin e, seemed a matter of no consequence whatever; a mere reference to Sk. dvar = Gr. θύρα seemed to settle it (see now Brugmann, § 480). We know better now, and yet, for reasons which I shall have to state hereafter, I have never wavered in my belief that θεός is connected with deva and deus, and the whole family of words derived from the roots div or dyu. (See p. 390.)

Comparative Philology at Leipzig in 1838.

I well remember a lecture delivered by Dr. Klee at my school, the Nikolaischule at Leipzig, in which he not only showed us the startling similarities between a number of important words in Greek, Latin, and, what was then an almost unknown language, in Sanskrit, but wrote on the blackboard the equation Zeus and Dyaus, θεός and deva. He explained to us at the same time the wonderful regularity with which, according to Grimm's law, Sanskrit and Greek and Latin words were modified in German. Was it possible, we said, that the dark people of Benares, who were then mere niggers in the eyes of German schoolboys, had spoken a language like that of Homer and Virgil, that their

words for father and mother were the same as ours, that they had a literature older than any of the literatures of Europe, and that there was such a continuity between their language and ours that, given certain phonetic rules, one could almost have guessed what the ancient dwellers on the Indus or the Ganges would have said for father, mother, sister and brother, &c.? Sometimes the Sanskrit words were nearly the same as our own. Thus same is in Sanskrit samá. The phonetic rule that initial *s* is represented by *h* in Greek and in Zend is well known, and we thus arrive at Zend hama and at Greek ὁμός, without any further trouble, except that we must remember that the pronunciation of the a, of which in Sanskrit we know nothing, may under certain conditions appear in Greek as α, ε, or ο.

These things were to us like a new revelation, like a new history of the world. We still possessed the power of being amazed at what seems now to most people almost a matter of course, depending for its truth on the mere observation of phonetic rules. We saw in language a bond that held all the prominent nations of the world together more closely than blood and brain or anything else could have done. For whatever else people may change, they cannot change their language, though they may replace it by another, which is a very different thing. Nations are really far more closely held together by language than by religion, by customs, by literature, or by forms of government, far more than by the colour of their skin, their blood, their skull, or their hair. There was enthusiasm in those early days when Bopp and Grimm ruled supreme. It was an age of discovery and of conquest, almost

a crusading age for the recovery of the sacred cradle of our race, and every new word that could be proved to have been uttered by the as yet undivided Aryan family, was like discovering an old uninjured window in the ruins of an ancient cathedral, through which we knew that our ancestors had once gazed at the world without and at the world above.

Bopp, Pott, Grimm.

It is often supposed that in those early days phonetic rules were not cared for. That is a great mistake. On the contrary, the labours of Bopp, Grimm, and Pott had their very foundation in the discovery of phonetic rules. What is called Grimm's Law, though it is not a law in the true sense of the word, but only a rule of observation, was like the blast of a trumpet before which the walls of classical prejudice against Comparative Philology fell down flat. Only with us in those days a phonetic rule was an historical fact, full of profound meaning, not a mere caveat against reckless comparisons. How, it was asked, did those wonderful changes come about which, with hardly any exceptions, made a Goth call his cattle faíhu, while the Hindu said pa*s*u and the Roman pecu? Why was the Sanskrit t*r*i*n*a, þaúrnus in Gothic, đorn in Anglo-Saxon, and Dorn in High-German? Why was a dog called *s*van in Sanskrit, *κύων* in Greek, canis in Latin, but hunds in Gothic?

Grimm's Law.

It is well known that Grimm considered the change of tenuis to aspirate and media, of aspirate to media and tenuis, and of media to tenuis and aspirate, as a kind of degeneration, as historical and

as successive, and that he even attempted to fix the date at which these changes, and particularly the change from Gothic to High-German, had taken place[1]. I have tried to show that physiologically such changes as that of d into t and th[2] cannot possibly be considered as successive, and that anything like fixing an historical date for such a change is out of the question. We must learn to understand the changes of the Lautverschiebung as the result of parallel dialectic variety, going back to pre-historic times, as a case of Nebeneinander, not Nacheinander.

It is from this point of view that Grimm's Law seems to me to assume its most interesting character, as disclosing to us the dialectic stage of Aryan speech long before it broke up into national dialects, such as Sanskrit, Greek, or Latin. The argument deduced from pre-Gothic forms in Finnish does not seem to me convincing[3], as it requires too many suppositions of which we know nothing. Nay, it seems to me to prove the contrary of what it was meant to prove, for the Gothic stage must surely have been reached long before any Teutonic words could have been borrowed by the Fins.

Exceptions to Grimm's Law.

But although this peculiar phonetic relation between the great Aryan dialects, known under the name of Lautverschiebung, put an end once for all to the old test of etymological comparisons, namely,

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[1] Gesch. der Deutschen Sprache, p. 483, 'hardly before the fifth or sixth century.'

[2] The terms tenuis, media, and aspirata, and such letters as t, d, th, are used, of course, as typical only of the actual sounds in each language. See Science of Language, ii, p. 230, note.

[3] Science of Language, ii, p. 257.

similarity of sound, and tamed, as Grimm said, the wild horses of etymology, it was felt at the same time as a great drawback that there remained so large a number of exceptions which seemed to neutralise its beneficial effect on etymological research. Exceptions which can be accounted for prove a rule; exceptions which cannot be explained invalidate it. This is the true meaning of 'exceptio probat regulam.'

Lottner, Grassmann.

The first who succeeded in eliminating some of these exceptions was my friend Lottner, then in Ireland. But the really decisive battle was fought by a man who was by profession a mathematician, and had most advantageously transferred the strict mathematical method to his linguistic studies. This was Grassmann [1], and I well remember the relief which his article in Kuhn's Zeitschrift (vol. xii) gave us. This was in 1863. The remedy, however, proposed by him was such that it roused a most violent opposition among what was then called the Old School. Grassmann's remedy was the admission of a number of roots, beginning and ending with an aspirate. This went against the phonological conscience of Pott, who very rightly considered such roots as monstrosities, and as contrary to the whole organism of Aryan speech. Most scholars at that time felt the same, and to a certain extent we were right. Such roots would have been monsters in actual Sanskrit as well as in actual Greek. But it had only to be pointed out that what we mean by a root is merely a postulate, and that in real language

[1] Science of Language, ii, p. 268.

one of the two aspirates of such roots would of necessity have been modified and appear either as media or tenuis. After this explanation the phonetic wrath even of Prof. Pott was appeased. No one was offended any longer to see the Gothic dags, day, connected with the root dah, to burn, to shine, or (ni)dâgha, heat; because dah presupposed dhah or dhagh, or, to put it in another way, because there were twin forms of the root, appearing in reality as either dah or dhag. Hence dag-s, day, but τέφ-ρα, ashes (for θέφρα), and Latin fav-illa [1].

Verner's Law.

However, there still remained some stragglers, and to have called them also back to the ranks was the merit of a young scholar, Verner, whose name has since become familiar as the discoverer of Verner's Rule, commonly called Verner's Law [2]. This discovery showed once more how indispensable a knowledge of Sanskrit, and in this case, of the Vedic accent, is to the student of Comparative Philology. Though our faith in phonetic rules was then as great as it is at present, we could never bring ourselves to say that the Gothic fadar was unconnected with Latin pater or Sk. pitar, because it ought to be in Gothic fathar, and not fadar. We simply accepted the facts and recognised the breach of a phonetic law. When it was asked at last why Sk. pitar appeared in Gothic as fadar instead of fathar, whereas bhrâtar, brother, appeared rightly as brôthar, it was pointed out by Verner

[1] See Fick, Indo-Germ. Lexicon, s. v. dhĕghŏ.

[2] K. Z., xxiii, p. 97 sq., 1877.

that we had only to look at the Vedic accent on pitár and bhrắtar in order to see that it is only when preceded by an originally acute vowel that the classical tenuis appears in Gothic as tenuis aspirate, while otherwise it becomes in the middle of words a media[1]. These discoveries, however, were important to us, not only as quieting our phonetic consciences; they were even more important as opening new and distant prospects into the most ancient history of language and of man. Roots with two aspirates, supposing we ascribe to them any historical reality at all, carry us back into a period which must have preceded the independent settlement of Sanskrit and the other Aryan languages; for such roots as dhagh had become impossible before the phonetic structure of any of those languages had been finally settled. That the Vedic accent should account for the irregular d in Gothic fadar, showed how intimately the accent was connected with the growth of speech, how much of intention there was in it, and how, though unobserved, it extended its influence from the earliest to the latest periods of Aryan speech.

Threefold Differentiation of Roots.

Such has been the progress in one field of linguistic research. It has reduced the apparently fortuitous changes of tenuis into aspirate, of aspirate into media, and of media into tenuis, to something like rule and order. The threefold modification of every consonant as either voiced (media), or voiceless (tenuis), or aspirated (voiced or voiceless), is now understood to have been in the beginning inten-

[1] Science of Language, ii, p. 272; Brugmann, § 530.

tional, that is, intended for the differentiation of roots as expressive of different concepts. If there was one root dar, to tear, it was felt necessary to distinguish it from another root dhar, to hold, and from a third, tar, to cross. As long as these roots could be kept distinct, the intention of language was fulfilled, but if dar was once pronounced dialectically without the voice being audible (and we know how common this is even now in certain parts of Germany), then tar also, the place of which had been taken, had to be differentiated again by δασύτης or greater stress. It had to be shoved, in the true sense of Lautverschiebung. This also is a phonetic peculiarity, at first hardly observed, as for instance in the Irish pronunciation of English tenues. Lastly, the aspirate, whether voiced or non-voiced, having thus been pushed out of its rightful place, would have to be distinguished once more from the others in the only way that was left, by giving up its rough aspiration and being pronounced as an unaspirated media, thus restoring the threefold differentiation which was necessary in order to distinguish three roots which in their intention had from the first been conceived as distinct.

Change of Place.

So much for what Hindu grammarians would call the changes in the Vâhyaprayatna of sparsas, checks or contacts. The changes affecting the sthânas or places of the consonants, which have likewise been reduced to much greater order after the days of Grimm and Bopp, can better be considered after we have examined the peculiar character of the vowels, because these sthâna-changes are often the result of

the vowels by which certain consonants are or were followed in the so-called Ursprache.

Schleicher's Ursprache.

Going back in memory over the successive stages of philological research, it is easy to see that it was the question of the Ursprache, or the earliest undivided Aryan speech, which, owing chiefly to Schleicher's personal influence, occupied the thoughts of comparative scholars for a considerable time.

In the year 1861 had been published the first edition of Schleicher's Compendium der Vergleichenden Grammatik, followed by a second edition in 1866. Schleicher was a man of very determined views, and he was supported by a number of very determined pupils. His leading idea was that out of the ten historical representatives of Aryan speech, Old-Indian, Old Bactrian, Old Greek, Latin, Umbrian, Oscan, Old Irish, Old Bulgarian, Lituanian, and Gothic, it was possible to reconstruct the typical language from which all these descendants had sprung. Though the idea itself, namely, that of a uniform typical language, was a mistake, yet in the carrying out of it Schleicher added much useful information on the development both of the vowel and the consonantal systems in the different members of the Aryan family of speech.

Dialects antecedent to Classical Speech.

His fundamental idea, however, was wrong, because it had been forgotten, or had not yet been perceived, that dialects come before classical speech, that the natural state of language is from the very beginning dialectic, that in the history of language variety precedes uniformity, wealth poverty, and that more

particularly in ancient times the spreading of language is parallel rather than successive (nebeneinander, not nacheinander).

This sounds strange at first, because what are called modern dialects are clearly corruptions or modifications of a nearly uniform type, are successive, and not merely parallel. Italian and French, as Romanic dialects, presuppose the old Latin, as spoken by the people, and would be unintelligible without it. That these dialects contained elements which were absent in classical Latin, was a later discovery which helped to trace the far-spreading ramifications of words back to a stratum which underlies even the classical stratum of Italian speech. We know now that it is in the nature of language that from the very beginning it should develop dialectic variety. Unless we hold that language was created and revealed en bloc, it follows that it must have arisen in great variety, in dialect, that is, really in dialogue, each speaker having the same right, and freely exercising that right, as it is exercised even now under the tents of half-civilised nomads [1]. There, as I have tried to show, each man, woman, and child contributes something of their own and modifies without hesitation what has come down to them according to their own way of hearing and pronouncing. The idea, therefore, that there was in the beginning a settled typical form of Aryan speech, which was modified in later times till it became Sanskrit, Greek, Latin, or Gothic, is incompatible with what we know of the nature of language. We know now that, and why, every attempt at reconstructing an Ursprache is wrong in

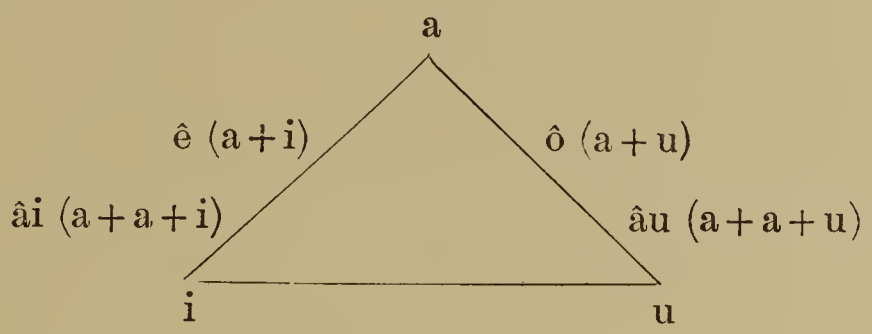
[1] Science of Language, vol. i, p. 59.

principle. We should not dream of reconstructing Latin out of French, Italian, and Spanish, nor Urgermanisch out of Gothic, Anglo-Saxon, and Old High German; not even Pre-vedic Sanskrit out of Vedic Sanskrit, common Sanskrit, Prâkrit, and the spoken vernaculars; much less Proto-Aryan out of Greek, Latin, Sanskrit, and Gothic. All this, however, does not prevent such speculative reconstructions as are found in Schleicher's writings from being extremely ingenious and even instructive, if only they teach us once more the old lesson that the ideal may everywhere be perceived as realised in individual phenomenal variety, but that it is beyond our reach in its typical unity and perfection.

Aryan Vowels.

It might be argued from Schleicher's point of view that the variety of Aryan vowels presupposes one original unmodified vowel, which became differentiated in time as a, i, and u. If historical considerations prevented scholars like Bopp, Grimm, and Schleicher from going quite so far, it did not prevent them and their pupils from taking these three modifications as the original typical triad underlying the whole vowel-system of the Aryan family of speech. Nor would I deny, much as our views have since been changed as to the historical development of the vowels of the Aryan languages, that from a purely phonetic point of view, a, i, u constitute the typical trichord underlying all the modulations of vowels in the historical representatives of Aryan speech, if only we remember that such postulates have no reference to the historical periods of Aryan speech.

It is well known that in Sanskrit and in Sanskrit alone this simple threefold arrangement of vowels has been consistently preserved. We have in Sanskrit



A, i, u exist both as short and as long. The vowel a, if strengthened, becomes á; the vowel i, if strengthened, becomes ái (e); u becomes áu (o). This strengthening of vowels is by Sanskrit grammarians called Gu*n*a (strength), while the lengthening of ăi (e) and ău (o) to āi and āu is called by them V*ri*ddhi, or increase. Sanskrit grammarians recognise in addition two vocalised liquids, namely, *r* and *l*, which can form a syllable by themselves, and are then called vowels, or sonants, *ri* and *li*. It was on this foundation that Bopp, Grimm, and Schleicher tried to build up and account for the vowel-system of all the Aryan languages.

It was soon discovered, however, that there was one important difference between the Sanskrit vowel-system and that of the other Aryan languages. Written Sanskrit had no short ĕ and ŏ, and the question was, whether Sanskrit had lost these vowels or had never possessed them. The Devanâgarî alphabet is certainly deficient in signs for ĕ and ŏ [1]. But what is the age of the Devanâgarî alphabet compared with the age of the spoken Sanskrit? Sanskrit was

[1] See Senart, Mahâvastu, p. xv.

spoken long before the time of the first inscriptions discovered in India, nay, it probably had ceased to be spoken before their time. Nor must we forget that the sounds of ĕ and ŏ are known to have existed in the Vedic Sanskrit, and that they likewise exist in Prâkrit and Pâli. It might also be mentioned that even the short ă, of which ĕ and ŏ are phonetic modifications, is never, except initially, written in the Devanâgarî alphabet. We know, in fact, nothing of its pronunciation except that it was different from that of all the other vowels. It was, as we are told by Pâ*n*ini, sa*m*v*r*ita, closed, not, like all the other vowels, viv*r*ita, open. Still if under certain circumstances short ă had been liable to be pronounced in ancient Sanskrit in a very special way, such as ϵ and o in Greek, or as i and u in Arabic, when written without any vowel-marks, it would be difficult to believe that the very minute treatises on Sîkshâ (pronunciation) should never have mentioned it. On the other hand, we must take into consideration that the change of gutturals into palatals in Sanskrit, like that of gutturals into dentals in Greek, has been traced back to the influence of a following more or less palatalised and palatalising vowel, that is, the short ă pronounced as ĕ (not as a or o); so that if we see the same change produced in Sanskrit by an unwritten vowel a, we can hardly escape from the conclusion that in Sanskrit also some of the unwritten short ă's possessed that peculiar palatal colouring which almost mechanically produces the change of a preceding guttural into a palatal, and must have differed therefore in quality from other short ă's which caused no such change. If *panka appears as πέντε

in Greek, and as pá*ñk*a in Sanskrit, the same influence which changed the guttural k into the dental t must have been latent in the Sanskrit a, which was able to change the guttural k into the palatal *k*. If we take another word, such as kaksha, in which k before a remains unchanged, we see that in the corresponding word, in the Latin coxa, the initial guttural is followed, not by the palatalised, but by the labialised a, the vowel ŏ.

That in Sanskrit itself short a was liable to a thorough palatalisation and labialisation, we see in such roots as tar, tiráti by the side of tárati, in kar and kuru, phal, phulla, or in guru, appearing in the comparative as garîyas. In Gothic also we find the modification of a into i and u, while the vowel-signs ĕ and ŏ are absent. Thus we learn that in Sanskrit this lesser degree of palatalisation or labialisation, which we find in Greek ε and ο, though graphically unrepresented, is yet recognisable by us as having been very real, namely in the changes produced by it on a preceding k.

I was surprised and pleased to find that Bopp had long ago expressed the same or a very similar conviction when he wrote :—

'I cannot believe that in the language of the Brâhmans, when it was a vernacular tongue, the a-kâra had always the power of a short a, and that the sounds of e and o never occurred in it ; I rather think that the sign used for the short a was put also to express a short ĕ and ŏ [1].'

This, after all, would not have been worse than if we use the same graphic sign a for the different sounds

[1] Brugmann, Morpholog. Untersuchungen, 3, 97 seq.

in and, art, ale, and all, or if in the Devanâgarî alphabet we write ज (*g*) both for the palatal and the so-called linguo-palatal media, which I transcribe by z or *z*.

We should, however, go beyond the limits of our evidence if we were to say, as some have maintained, that the final a of *páñka* was in the original Aryan language ĕ, before it became ă in Sanskrit. All that on the strength of the evidence before us we are justified in maintaining is that in Sanskrit certain short ă's infected a preceding guttural with a palatal pronunciation, and that these were the same ă's which in Greek appear as ϵ. The change of k into *k* was, of course, purely mechanical, not dynamic, and it made indeed little difference whether in writing it was represented by a modification of the consonant or of the vowel, that is, by च (*k*a) or by κϵ or τϵ.

Correspondence of Aryan Vowels.

After the discovery that Sanskrit also possessed once, besides the simple vowels a, i, u, the simple vowels ĕ and ŏ, just like Greek and Latin, though they were left without graphic representation, and can be discovered only by their having caused or not having caused certain effects on the preceding consonant, there followed long discussions as to the exact value of these vowels and of their correspondents in the Western and Eastern Aryan languages. Much ingenuity was spent on this subject by scholars such as Schleicher, Curtius, Amelung, Brugmann, Osthoff, Collitz, Ascoli, Fick, Schmidt, and others.

I must confess that after the publication of Curtius' paper on the Spaltung des A-lauts in 1864,

I was prevented for many years by more pressing occupations from being more than a spectator of these animated discussions. I must also confess that for a time these discussions were carried on in a tone that made many scholars hesitate to join in the fray. The respectful tone towards the Guru, and the kindly feeling towards the old father Sokrates, seemed for a time to have become extinct among the pupils of Curtius. Still it is pleasant to see how, after the white heat of the controversy has subsided, there remains some pure metal, while many erroneous opinions, though put forward at the time with great confidence, were burnt to ashes and blown away.

There is one assertion, however, against which I have always protested, and must protest once more. I do not deny that we owe a great deal to the labours of some of Curtius' pupils, who towards the end of his life broke away from him, and who were represented as having founded a completely new school of Comparative Philology. That seems to me a total misrepresentation. Scholars like Brugmann and Osthoff were proud to carry on the work from the very point where Bopp, Grimm, Pott, Benfey, Schleicher, Curtius, and others had left it. There was no break, nor was there an entirely new start.

Unchangeability of Phonetic Laws.

The two principles which are generally represented as distinctive of this new school, the inviolability of phonetic rules, and the sway of analogy, were no new discoveries, though no doubt they were carried out with far greater stringency and determination than they had ever been before. I myself

had ventured to say in my Lectures on the Science of Language, 1861, that phonetic laws were as unchangeable as the laws which regulate the circulation of our blood, and, like Schleicher, I had claimed on that very ground a place among the Physical Sciences for the Science of Language. It is true that Curtius and his school admitted sporadic cases or exceptions to phonetic rules, but if the new school proclaimed phonetic laws to be as unchangeable as the law of the Medes and Persians, they also had to add a clause, 'provided that all the circumstances are the same.' With this proviso Curtius and everybody else would have readily accepted the new dogma of immaculate phonetics, but the great difficulty, the finding out in each case whether all the circumstances, known or unknown, were exactly the same, would have remained as great a stumbling-block as ever.

Analogy.

The second principle, the influence of Analogy or False Analogy, was certainly not discovered, as Mr. Giles says, by Whitney in 1867[1]. I had fully discussed it in all its bearings in 1863[2]. I had traced it back to the levelling influence of children, and given the very instances which Whitney quotes, such as I goed, I comed, for I went, I came, badder and baddest for worse and worst. I never like to claim priority, but considering how Whitney went almost step by step over the same ground which I had traversed in my Lectures, considering that he admits in his Preface (p. vii) having borrowed illus-

[1] Giles, Manual of Comparative Philology, p. 45.

[2] Science of Language, ed. 1891, vol. ii, p. 220.

trations from my Lectures, and considering that it would be difficult to borrow illustrations without borrowing the principles that had to be illustrated, I think I am justified in stating that the borrowing in this as in other cases was at all events not on my side. It is never pleasant to assert the right of priority, but when one is suspected of having without sufficient acknowledgment borrowed from others what others have borrowed from oneself, one surely has a right to appeal to dates. Everybody knows best what he has discovered by his own labour, and most people know what they have borrowed from others. The violent language which Whitney used whenever he wished to accentuate his independence or his dissent from my views, has not prevented other scholars from discovering his indebtedness to my volumes, an indebtedness that goes far beyond mere illustrations; but while I feel bound for my own protection to make this chronological correction, I am the very last to claim any share in the great discoveries which were made by Brugmann, Osthoff, and others in applying this principle of Analogy to every minute change in the growth of language.

Whether we call this important element in the growth of language Analogy or False Analogy makes little difference, so long as we understand what we mean. It may be quite true, as I said in a note (Science of Language, ii, p. 221), that what we call 'False Analogy,' or what the ancients sometimes called 'Anomaly,' is perfectly legitimate, that children have an immemorial right to their irregularities, and peasants to their vulgarities. I do not deny the principle of liberté and égalité in language, but that does not take away our right of treating such forms as

essendo or suntemu as blunders from a Latin point of view, or, in more civil language, as false analogies.

Importance of Sanskrit.

It has also been supposed that through the discoveries of this new school of Comparative Philology the authority of Sanskrit as the most important member of the Aryan family of speech has been much reduced. It seems to me, on the contrary, that Schleicher's old dictum that the more Eastern an Aryan language the more primitive its grammatical organism, after having been fiercely attacked as high treason, has met with new and very strong support in the very school that was supposed to have refuted it. The liability to vocalisation inherent in the r, the l, and the nasals, by means of which so many difficulties have lately been solved, was clearly indicated and more than indicated in Pâ*n*ini's Grammar. Still more surprising and important in its far-reaching ramifications was the discovery of Verner that it is the primitive Vedic accent which regulates the phonetic and grammatical development of the Western languages in their minutest detail. It is sometimes difficult to believe in the continuity of the working of the accent from the earliest to the latest formations of Aryan speech, and still more difficult to understand it. But nothing teaches us more forcibly the solidarity of Aryan speech, and indirectly the solidarity of those who spoke and who speak it, than this working of the accent, as the vital principle, nay, as the very soul of language, whether spoken in India or in Germany, whether thousands of years ago or at the present moment.

The Vedic Accent.

In these researches into the working of the accent, I, like most students of Pâ*n*ini, have always followed in the footsteps of Benfey. Much, as I have often said, might have been learnt from the ancient Hindu grammarians, nay, many a discovery need not have been made for a second time, as it lay ready at hand in the Sâstra of Pâ*n*ini, if only rightly interpreted. The very nature of the accent, which to us seems to be stress, but which, as I pointed out (in 1869), was originally pitch, was clearly indicated by such names as svara, tone, udâtta, raised, anudâtta, not raised. The Prâtisâkhya, which I edited and translated in 1869, leaves no doubt on this point, as little as the Greek name of προσῳδία, i. e. by-song, accentus, though the transition from this originally musical to a stress accent is a phase in the history of language which still awaits a satisfactory explanation.

Weak and Strong Terminations.

Bopp's important discovery, for instance, that certain case-terminations are what he calls weak and others strong, that strong terminations require weak, weak terminations strong bases, was clearly exhibited in Pâ*n*ini's grammar. And not only were the facts correctly stated there, but the only true explanation of them was given, an explanation first put forward by Benfey, and now, I believe, accepted by everybody. All case-terminations and all suffixes marked in Pâ*n*ini's grammar by a p (pit) are meant to be anudâtta (Pâ*n*. III, 1, 4), that is, they have no acute accent, and either leave the base

unaffected or allow it to be strengthened. This is the general rule applying to nominal bases in a, i, u, and to a number of other bases given in our grammars as regular or unchanging. Then follow the exceptions (Pân. VI, 1, 166 seq.), that is, the bases after which certain terminations retain the acute, and therefore produce weakening of the base.

Historically the process was probably the reverse, but that does not concern a grammarian like Pân*i*ni. He gives us simply the facts of language, though by classifying them he enables us to see their evolution. If we consider that it was the very nature of the accent to fall on the modifying, and therefore for the time the most interesting and most important syllable, we shall easily understand why the modifying terminations of nouns required the accent. These terminations expressed the local, temporal, modal, or causal relations of the members of a sentence; they required therefore to be emphasised, that is, accentuated. Only the terminations which retained least of their originally local character, which had in fact become purely logical, marking no more than the subject and the object of a sentence, did not require this emphasis, or had surrendered it, if they ever possessed it. Hence in the case of a limited number of ancient and therefore irregular nouns, the terminations of the nom. and acc. sing., of the nom. and acc. dual, and of the nom. plur., are unaccented or weak, and leave the base unmodified, nay, in some cases cause it to be strengthened. This is the general principle, and perfectly intelligible in its generality. Benfey understood this principle clearly; only treating language historically, he saw that what seem to us

exceptions constitute really the original state of things, and reveal the underlying principle which is lost in the constantly increasing class of regular nouns.

I well remember, many years ago, when on a visit at Berlin, placing these facts in a conversation before my old teacher, Prof. Bopp, before he had published his book, On the System of Accentuation (1854), though being unable to convince him of the true character of the accent, so far as it was meant for differentiation or emphasis, and its purely mechanical working, so far as its phonetic influence was concerned. I mention this simply in order to show how natural, nay, how inevitable this view of the working of the accent in Vedic Sanskrit was to any one acquainted with Pâ*n*ini's grammar, and with the practical application of his rules to nominal and verbal bases in the Veda. Every page of Sâya*n*a's commentary is filled with applications of the rules of Pâ*n*ini to the verbal and nominal forms occurring in the Veda.

The Explanation of the Ablaut.

And what applies to declension and the Pada-, Aṅga-, and Bha-bases [1] of nouns, applies with equal

[1] M. M., Sanskrit Grammar, sec. ed., § 179. I look upon the Pada-base as the true base, on the Aṅga-base as strengthened, and the Bha-base as weakened. We find the Pada-base always used in compounds. I should call the Pada-base the Level-base (Grundstufe), the Aṅga-base the High-base (Hochstufe), and the Bha-base, where it exists, the Low-base (Tiefstufe), though it would be better perhaps to retain the Sanskrit technical terms. The High- and Low-bases admit of subdivision, and we might therefore distinguish between a Highest and a Lowest base,

strength to conjugation and the weakening and strengthening of verbal bases or roots. This weakening or strengthening of verbal roots was likewise perfectly well known to the ancient Sanskrit grammarians. Only when Bopp spoke of strong and weak terminations requiring Gu*n*a or no Gu*n*a of the radical vowel, Hindu grammarians simply marked a number of terminations with the p, which was meant to show that these terminations had no accent, and that therefore the root retains before them its accent and its full strength. Here, no doubt, it would be very difficult to analyse the grounds on which the linguistic or logical conscience of the Âryas was induced to consider some terminations as weak (unaccented) and others as strong (accented). And here too we have to admit that the number of exceptions is very great, but that nevertheless the ancient grammarians were right in laying down their general principle as to the accent causing the strengthening or weakening of the verbal base. If we say in Sanskrit :—

dvésh-mi,	but dvish-más,
dvék-shi,	dvish-*thá*,
dvésh-*ti*,	dvish-ánti,

the cause was the accent, which had forsaken the terminations of the singular, but remained on those of the plural. Why, we cannot tell, perhaps we have no right to ask, considering the sovereign power that belongs to the framers and speakers of every language, the influence of analogy and of frequent repetition.

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calling them, when necessary, the Long-base (Dehnstufe) and the Loss-base (Schwundstufe).

We may perhaps in the throwing of the accent on the modifying syllables discover the wish and will of the speakers, but it was nevertheless a mistake on the part of Grimm to assign a dynamic character to these changes of the nominal and verbal bases. It is natural that Semitic scholars should represent the vowel changes such as Katala, Kutila, &c., as dynamic changes of a root KTL, because of them no mechanical cause has yet been discovered; but that Grimm, who had himself established the purely mechanical nature of the Umlaut, the change of Vater to Väter, Mutter to Mütter, &c., should not have discovered a similar mechanical character in such changes of Ablaut, as I bind and I bound, véda (οἶδα) and vidmá (ἴδμεν), Ich weiss and wir wissen, is strange. It shows, however, once more the truth of Schleicher's old dictum as to the supreme usefulness of Eastern Aryan grammar for a proper understanding of Western Aryan speech, when we see how the Ablaut which in the eyes even of a Grimm remained something mysterious, became as clear as daylight in Sanskrit. If we ask Sanskrit grammarians why they say in the perfect:—

véda = οἶδα,	vidmá = ἴσμεν (ἴδμεν),
véttha = οἶσθα,	vidá = ἴστε,
véda = οἶδε,	vidúr = ἴσασι,

their answer would be, because the terminations of the singular are pit, have an indicatory p, have therefore no accent, and do not weaken the root. Why certain terminations have the accent and others have not, we can only guess. But whatever the cause of the unaccented character of the terminations of the singular or of the accented character of the terminations of the plural and dual may be,

their action on the base is now seen to be purely mechanical. This helps us to an understanding of that mysterious process, the facts of which had for the first time been collected and classified by Grimm, though they remained unaccounted for till scholars began to understand the meaning of pit and ṅit.

And what applies to the personal terminations applies of course with equal force to the verbal suffixes which form the verbal bases of the Bhû and Tud, Div and *K*ur-classes. Here too, if the so-called Vikara*n*a is pit, the root is strengthened. Thus budh with vikara*n*a *s*ap, becomes bódha in bódhâmi, while tud, which takes the apit vikara*n*a *s*a, remains tudá, as in tudấmi. All this is perfectly clear, if we adopt the phraseology of the Hindu grammarians, and follow both the general rules and the exceptions which they have so carefully collected.

Weakening and Strengthening of Base.

We need not enter into the protracted discussion which followed this discovery, namely, whether the pit-terminations caused a strengthening, or the ṅit, i. e. apit-terminations, a weakening of the root; whether in fact the original and the more ancient form of the Sanskrit root was budh raised by Gu*n*a to báudh, i. e. bodh, or whether it was báudh, i. e. bodh, weakened to budh. I fully recognise the ingenious arguments by which on the strength of such forms as sarati and s*r*ita, patati and paptur, we are asked to accept báudh, not budh, as the original root; nor do I see any harm in speaking of beudh or πευθ as the standard form of their verbal bases. All I can say is that language is not easily driven into a corner by argument. It does not claim

to be consistent throughout, but sends us away again and again with a simple 'car tel est mon plaisir.' It has never been proved that chronologically báudh was anterior to budh, or ved to vid; but even if it had, it would still be impossible, from a purely phonetic point of view, to treat báudh as more original than budh, or váid as more primitive than vid. Those who look upon roots as simply the last residue of grammatical analysis, would never stop at báudh in their phonetic analysis, but would postulate budh as well as *sri* as the last remnants, or as the roots. Those who look upon roots as occurring in actual speech, would appeal to such words as dîrgha-*sru*(t), ushar-budh, goshu-yudh, as showing the simplest forms of the roots *sru*, *b*udh, yudh. As for myself I should never call budh or yudh in such compounds roots, because, though they are outwardly identical with the roots budh and yudh, they are intended dynamically as real parts of speech.

If we reason consistently we are driven to admit that a root, quâ root, can never appear on the surface of language.

For practical purposes, however, it seems to me far better, when treating of Sanskrit, to speak of a root budh than of a root báudh or beudh, or váid and veid. Sanskrit grammar knows of no such roots, and each language has a right to its own grammatical terminology and its own phonetic idiosyncrasies. As Sanskrit scholars we must continue to speak of tip and atip, of Gu*n*a (strengthening), V*ri*ddhi (lengthening), and Samprasâra*n*a (contraction), though in Comparative Grammar we may, if we like, adopt such terms as Hochstufe, Mittelstufe, Tiefstufe, Schwächung, Dehnung, and all the rest.

The difficulty in introducing a new terminology is to get it generally adopted, and to make it quite clear how it corresponds with the terminology which it is meant to supplant.

Aṅga-, Pada-, and Bha-bases would be accurately represented by Hoch-, Mittel-, and Tiefstufe, but Gu*n*a and V*ri*ddhi would require a far more accurate definition in Sanskrit. What we call V*ri*ddhi seems to me in its persistent grammatical character to be peculiar to Sanskrit, though analogous formations occur sporadically in other Aryan languages also. I doubt also if this V*ri*ddhi depends purely on the accent, and whether it is not rather a lengthening produced by certain derivative suffixes. Thus the long â in tudấmi, and the short a in tudási are not dependent on the accent, as little as the ο of φέρομεν, compared with the ε of φέρετε. The change of buddha into bauddha, of veda into vaidika, of pata into pâta, is a lengthening always produced by certain suffixes, but not by the accent which produces strengthening, and not mere lengthening. Taking all in all, I should certainly prefer to accept the roots in the form in which they are given by Sanskrit grammarians, nor can I accept De Saussure's argument as clinching the matter. 'If we accept budh,' he says, 'as the root, we must call pt by the same name, because whenever we find budh, as for instance, in bubudhúr, we find pt as in paptur!' Now, first of all, I should by no means be frightened by a root PT, in fact I should consider it as an excellent representative of the ideal state of a root, just as in Hebrew we call KTL a root, and not Katala. Secondly, before we accept this conclusion, it is necessary to classify the roots as given in Sanskrit, and to distinguish, as in the

case of nominal bases, at least three classes, (1) roots that can be both weakened and strengthened; (2) roots that can be strengthened, but not weakened; (3) roots that can be weakened, but not strengthened.

Budh is a root that can never be weakened, because its u is radically essential. Change it to a or i and you destroy the root. Hence bubudhur could not be weakened to bubdhur, like papatur to paptur. The same applies to many roots, such as khad, knas, taksh, tard, which form *k*akhadur, *k*aknasur, tatakshur, and tatardur, because if they dropped their a, they would for an Indian mouth at least cease to be pronounceable. Why not continue therefore to call pat the root, or, if necessary, the Middle-stage, or better still the Level-stage, and in roots like pat to treat pát (pât) as the High-stage, and pt as the Low-stage, or Loss-stage? Some roots can have no Lower-stage, such as, for instance, taksh, tud, budh; some can have no Higher-stage, such as dhâ, sthâ, dâ, at least in Sanskrit; some have both, such as *g*an in *g*an*g*anti, in *g*âna (birth) and in *g*a*gñ*e. In the case of roots having medial or final sonant r (ऋ), we must remember that this vowel may represent in Sanskrit both ĕr and rĕ. This ĕr appears weakened in s*ri*ta, strengthened in sarati. The rĕ of grĕh appears weakened in g*ri*h*n*âti, g*ri*hîta, strengthened in agrahît. If we include V*ri*ddhi, we should also include Lopa, and we might then call the âr in asârshît and the râ in *g*agrâha V*ri*ddhi or Long-stage (Langstufe), and the Lopa as in sasrur the Loss-stage (Schwundstufe). I do not see that the admission of roots, such as báudh (bodh) or vaid (ved) or sar, would simplify in the least the phonetic process which we have to explain, and I think that

the native grammarians of India have set us an example which we should do well to follow.

We can easily understand why in the weakening of a base like pat to pt, the udâtta on the following syllable led to the swallowing of the a in the radical syllable, but why, as we are now told, the same influence should dissolve a diphthong with its component elements and leave us i and u instead of ê (ai) and ô (au) is more difficult to understand. Nor would Koegel's suggestion that ê became î and afterwards ĭ, that ô became û and afterwards ŭ, help us much, either from an historical or from a phonetic point of view. There are elsewhere no such intermediate stages in Sanskrit as î, û between ê, ô and ĭ, ŭ, for Saussure's derivation of pûta from péu̯ata has never been proved, while Sk. gűhati can hardly be explained as a weakening of *góhati, because, so far as we know, gohati never existed. Nor can such isolated cases as the Gothic lûkan, sûgan, and sûpan account for the far more widely-extended action of the accent on the radical vowel in Sanskrit. That i and u, if pronounced with high pitch, should approach the sound of ê (ai) and ô (au), is intelligible phonetically, at all events far more so than the dissolving of the diphthongs ê and ô into their component parts and the abstraction of their first element, the ă. Even in modern languages an accented i is apt to become ei, and u au, as in line, now pronounced lain, or hûs, now pronounced haus. The fact that the ancient grammarians of India who spoke and heard the language which they analysed, should have been led by what they heard with their ears to the admission of budh being strengthened (guṇa) to bă̆udh, but not of bă̆udh being weakened

to budh, ought likewise to carry a certain weight in a question[1] on which the two scales seem otherwise to remain on a perfect level. We owe far too much to the ancient grammarians of India and to their marvellous observations on the minutest action of the accent on the vowels of roots to allow an historical term like that of Gu*n*a to be entirely swept away.

As to the lengthening of u in gûhati, why should it be treated differently from that of the i in dîvyati or of a in *s*am, tam, dam, *s*ram, bhram, ksham, klam, and mad, which all lengthen their a to â (Pâ*n*. VII, 3, 74).

True Value of Phonetics.

It has often been said of late that these minute phonetic researches have absorbed the interest of students of language far too much, that they are, after all, the means only for higher objects, and that there is danger here as elsewhere of the means being mistaken for the end. There is, no doubt, some truth in this. As often happens, what was originally an instrument only in the hand of experienced operators has developed so many new aspects, has opened so many new questions, and roused so many new inquiries, that after a time it has come to rank as an independent science.

Little did I dream when I was blamed by Benfey and others for having for the first time introduced Phonetics into Comparative Philology, for having insisted in my Lectures (1861) on the necessity of making Phonetics the very foundation of that science, that in so short a time the foundation

[1] Cf. Benfey, O. und O., iii, p. 24.

would have risen into so magnificent a structure as to overshadow almost the whole Science of Language itself. Certainly the discoveries that have been made in these subterraneous regions of language are most amazing. The minute coincidences, the continuous parallelisms in the changes of vowels and consonants are often almost beyond belief; and yet, after the most minute examination, beyond the reach of doubt. And if then we consider that these unvarying changes in vowels and consonants take place in a body which has hardly any material coherence, which consists of fleeting breath uttered without restraint by millions of individuals under constantly varying circumstances, which for centuries has continued under no control of a permanent literature, or of schools and academies, the fact that an accent as once pronounced in Vedic Sanskrit determines our saying Vater, Mutter, but Bruder, seems at first to require a greater effort of faith than almost any miracle. If we remember how hardly any vowel is pronounced really in the same way by different speakers, how local dialects even in modern times play havoc among our vowels, how the newspaper-boys along the stations of the G.W. Railway shout piper instead of paper, which paper was originally the Egyptian word for papyrus, we hesitate before we can believe that every vowel in Sanskrit, Greek, Latin, Gothic is really what according to unchangeable laws it ought to be[1], and that the slightest vowel-change, say of Latin mater into moter, would break the relationship of

[1] See Chips from a German Workshop, 1894, vol. i, p. 158, on *dead* and *death*.

the names for mother as between Latin and the rest of the Aryan family.

The Becoming of Letters.

Nay, we must go even a step further. We generally look upon the differences in vowels and consonants when occurring in the same words in Sanskrit, Greek, Latin, and Gothic as changes due to evolution. We speak of the t in the Sanskrit word bhrâ̆tar becoming th in Gothic brôthar, of Sk. dh becoming Gothic d, and of Sanskrit d becoming Gothic t. This may be useful for practical purposes, but it is against all historical principles. If the phonetic tendency of Gothic was to change t into th, the same language could hardly have changed th (dh) into d, and d into t.

Nor have we really any right to look upon the t in Sanskrit trayas, upon dh in Sanskrit *dhvar (dvar), upon d in Sanskrit dvau as more ancient or more legitimate than the th in Gothic threis, d in Gothic daur, or t in Gothic tvai. We are driven, whether we like it or not, to look upon these consonantal varieties as dialectic varieties of pronunciation, prevailing during the pre-historic period of Aryan speech, and preserved with wonderful pertinacity by one or the other of the different members of the Aryan family of speech through thousands of years to the present day.

And this view of the changes of consonants applies with equal force to the changes of vowels which we have just been considering. When we say that Sk. i and u were strengthened to ăi (e) and ău (o), and lengthened to âi and âu, or that Ig. ei or eu were weak-

ened to i and u, we take for granted things which have never been proved. Can we imagine that there ever was a period in the history of Sanskrit when there were only words with simple vowels, such as vid, but not yet veda, budh, but not yet bodha? Or, to take the other view, was there ever a stage in the growth of Greek when there were forms like οἶδα, but not yet ἴσμεν, πείθω, but not yet ἔπιθον?

Neither one nor the other question can honestly be answered in the affirmative except by those who believe that language grew up according to the rules of grammar, nay, according to our own views of Sanskrit and Greek grammar. I believe in no chronological succession between i and ê in Sanskrit as little as between i and ei in Greek. The Nebeneinander in the growth of language is far more important in my eyes, and far more true than the Nacheinander. We shall then gain a much more intelligible view of the development of speech than we had before. We may still look upon certain formations as more regular, i. e. as supported by a larger majority of cases than others; we may say in that sense that in its consonantal skeleton pitar is more primitive than Gothic fadar (faðár), nay, some would wish to represent Greek οἶδα as more original than the ἰς in ἴσμεν (ἴδμεν). But we need not therefore look upon Sanskrit pitár as chronologically antecedent to faðár, or on ἰδ in ἴδμεν as the antecedent cause of οἶδα. Even phonetic considerations forbid such a view. If every word is considered as the product of another, we are driven at last to such violent proceedings as, for instance, the derivation of sîd in sîdati from sisasd, to which I alluded before. Sad is no doubt the most general abstract expres-

sion for sitting in Sanskrit, but it does not follow that sad went through a regular grammatical process like that by which we are told that sad was first reduplicated and became sisad, that then the second a was dropped, giving us sisd, that in sisd the second s became z, that the z in sizd was dropped and its loss compensated by lengthening the vowel, and leaving at last sîd in sîdati. This is not the way in which language really grows and spreads. Several of these hypothetical changes are against the very genius of Sanskrit, and no parallels taken from other languages would be of any avail. Languages change on a much larger scale, and chiefly by means of broad analogies. Why not appeal therefore to analogous cases in Sanskrit? We have in Sanskrit itself tir by the side of tar, and derivatives such as tiras and tîra. We have sidh by the side of sâdh, and derivatives such as both sâdhu and sidhyati. Why not accept therefore sîd as a parallel form of sad?

We are so accustomed to look everywhere for a causal nexus, and to accept every cause as antecedent to its effect, that it was natural, no doubt, to look upon the changes and varieties of language also from the same point of view. Nor do I see much harm if for practical purposes we speak of Sanskrit sisd being changed to sîd; or, as we saw before, of Sanskrit t being changed into Gothic th, and of Gothic d being really preceded by Sanskrit dh. Only when more seriously considering the nature of language and the possibilities of its historical changes, we ought not to forget that what seems antecedent grammatically or phonetically need not have been so chronologically, but that out

of the unbounded wealth of dialectic possibilities, a few only survived in what remains to us of ancient language and literature, and that in language as in a primitive state of society the nephew often may take the place of the son, and uncles claim the name of parents.

Aryan Vowels and their Legitimate Changes.

After this digression we shall be all the more able to appreciate the valuable results which have been obtained by the phonetic researches of the last generation. It has been clearly proved that the original wealth of Aryan vowels was not confined to ă, ĭ, ŭ, ê (ai), ô (au), âi, and âu, but that all (not even excluding Sanskrit) possessed originally the vowels ă̄, ĕ̄, ŏ̄, ĭ̄, ŭ̄, ei (Sk. ê), eu (Sk. ô), oi (Sk. âi), ou (Sk. âu), nay, that they likewise possessed r, l, m, n, pronounced like vowels, and forming a syllable, either by themselves or as preceded and followed by consonants. Sanskrit had even invented graphic signs for two of these sonant semivowels, viz. ऋ, ॠ, *rĭ*, *rî*, and ऌ, *li*, but in their effects very similar sounds exist to the present day in modern languages also, in the peculiar hurried pronunciation of such words as father, kindle, bottom, bounden, &c. It is often difficult to say who was the first to make some of these phonetic discoveries. In Sanskrit the existence of the vowels *ri* and *li* required no discovery, for they were there as ऋ and ऌ. I remember however, if I am not mistaken, that it was my friend Lepsius who many years ago was the first to point out that nasalisation was a simple grammatical expedient, a kind of gu*n*a, in fact, and who placed forms such as man and mata, gam and gata, da*s*ati

and dada*ms*a on a level with sar and s*r*ita, bodh and buddha, dis and dide*s*a, &c.[1] This influence of nasalisation extended very far. All roots marked in the Dhâtupâ*th*a with i are liable to be nasalised (Pâ*n*. VII, 1, 58), others are nasalised in certain tenses only, such as mu*k*, mu*ñk*ati, vid, vi*nd*ati, si*k*, si*ñk*ati, &c. (Pâ*n*. VII, 1, 59). The principle is the same throughout, though the application varies (Pâ*n*. VII, 1, 60–69). In a similar way we see that yu*g* was raised by nasalisation to yu*ñg*, and that the nasal became syllabic in yuna*g*. In cases like that of yu*g* the nasalisation of yu*g*, by way of strengthening the root, seems certainly a more natural proceeding than the denasalisation of a supposed original yu*ñg* or yuna*g*.

The Accent.

The general result at which we arrive from an examination of the grammatical observations of Pâ*n*ini, is that he was fully aware of the influence of the accent of terminations and other suffixes on verbal as well as nominal bases. This refers particularly to the earliest stage of Aryan speech, of which even in the Veda we possess fragments only. We can see what the accent was meant to be, but we also perceive how the original working of the accent has been interfered with by false analogy and by a general forgetfulness of its natural purpose. Why certain terminations and suffixes should have retained the acute accent, while others have not, did not enter into the sphere of Pâ*n*ini's inquiries. He was satisfied with the fact that certain termina-

[1] Science of Thought, p. 620.

tions and suffixes did weaken the base, because they had originally the acute accent, while unaccented terminations either left the base unaffected, or required its being strengthened. For practical purposes, the more modern view comes to the same result in the end, even though the root be looked upon as weakened by accented terminations and suffixes, and as remaining unaffected by unaccented terminations and suffixes.

Even if we were to look on ved as unaffected, and on vid as weakened, on yu*ñg* or yuna*g* as unaffected, on yu*g* as weakened, we should have to admit that both the High-stage (Gu*n*a) and the Low-stage are liable to great variety in different languages, so that we see in Sanskrit declensions a third base, the Bha-base by the side of the Pada-base. In some of these languages it would be useful to distinguish five stages, the Level-stage with the High- and Long-stages on one side, and the Low- and Loss-stages on the other. In German these five stages might be called Grundstufe, Hochstufe, Dehnstufe, Tiefstufe, and Schwundstufe. In counting from below, the Schwundstufe would be one, the Tiefstufe two, the Grundstufe three, the Hochstufe four, and the Dehnstufe five, and in some cases even this number might have to be increased. We must not expect, however, that every base, whether verbal or nominal, is represented in every one of these stages. Some, in fact most bases, are altogether unchangeable ; others have two, three, four, very few have all five stages. There are phonetic difficulties which, as we saw, would prevent the Loss-stage in bases like budh or vid, or would necessarily restrict the High- and Long-stages to the same form, as in pat,

which in Sanskrit cannot go beyond pât. We see all the five stages in cases like :—

3. Level-base (Grundstufe) : πατέ) in πατέρα, Sk. pitáram.
4. High-base (Hochstufe) : πατήρ, Sk. pitâ.
5. Long-base (Dehnstufe) : πάτωρ.
2. Low-base (Tiefstufe) : πατράσι, Sk. pitŕíshu.
1. Loss-base (Schwundstufe) : πατρός, Sk. pitúr.

Ablaut.

The most important application of the principle of equilibrium between base and suffix has been its application to what was known before as Ablaut.

We saw that Grimm looked upon Ablaut as something dynamic, as a vowel change intended from the very beginning to express a change of meaning, and analagous to such changes as Katala, Kutila, &c. in Semitic dialects. Bopp was the first to claim for the Ablaut as well as for the Umlaut a mechanical explanation. In this he succeeded to a certain extent, though the process itself remained as mysterious as ever. Some of this mystery was removed by Benfey, with the help of the ancient Sanskrit grammarians, though even then the mystery was not yet completely cleared up. The facts have since been more fully collected and far more carefully classified, but the real and primal cause remains as obscure as ever. After the excellent work done by Holtzmann, Benfey, De Saussure, Osthoff, Brugmann, and others, it was left to Professor Hübschmann[1] to reduce their accumulated observations to something like order, and thus to make the whole process of the Ablaut and all that is connected with it orderly and

[1] Das Indo-Germanische Vokalsystem, 1885.

clear. We know now that with all the freedom which the vowels of Aryan words enjoy, there are fixed limits which they cannot overstep in their modifications. We know, for instance, that roots such as vid (or veid), budh (or beudh) can never lose their vowels i and u, though other roots having the a-vowel may lose it, as in paptur for papatur. We know that the modifications of the i-vowel can never be those of the u-vowel or a-vowel, that is to say, that forms like ἐπυθόμην can have no relationship with ἔπιθον, or πεύσομαι with πείσομαι, or ἐτύχθην from τεύχω with ἐτέχθην from τίκτω. The only reservation to be made is that there are cases in which the radical vowel itself varies, or, as we might also say, where there are from the beginning parallel roots differing in their vowel only. Thus there is sidh by the side of sâdh ; sidh giving sidhyati, seddhâ, asidhat, sedhayati (Pân. VI, 1, 49), sâdh giving sâdhnoti, sâdhyati, sâddhâ, sâdhayati, asâtsît. There is khid by the side of khâd, as we see in (Pân. VI, 1, 52) *k*ikheda and *k*ikhâda. Other cases of a similar character have been collected by Pân*i*ni (VI, 1, 47 seq.)[1], such as sphorayati by the side of sphârayati.

We have also to be prepared for such parallel forms as tar, tir, tur ; gar, gir, gur, whether we treat them as independent roots, or as modifications of the same root. We know, as Hübschmann has shown (p. 65), that the so-called heavy roots, ending in â, never show short a except before y (and v ?), that is to say, we may have the Ablaut-series â–â–î,

[1] Science of Thought, p. 254, where some roots should be omitted.

and ă before y, while in light roots the vowel series is always å–a–a and never i. A knowledge of these limits has proved a useful check on many etymologies which formerly seemed unassailable, while a knowledge of what is legitimately possible in vowel changes has placed other derivations on a much safer basis. The only point on which I differ from Prof. Hübschmann is the order of the stages through which, according to him, vowels have to pass as they are either weakened or strengthened. I think we should always start from the Level-stage (Grundstufe), which is either reduced on one side to the Low-stage (Tiefstufe), and the Loss-stage (Schwundstufe), or raised on the other to the High-stage (Hochstufe), and the Long-stage (Dehnstufe). In many cases therefore I should call what others call Low-stage, Level-stage, as, for instance, Sk. budh, vid, while I see in Sk. bôdh and vêd a High-stage, and in Sk. bâudh and vâid a Long-stage. This, however, does not affect the facts, but only the principle. A large number of facts in illustration of these Ablaut changes may be seen in Hübschmann's and Brugmann's works. A few instances must suffice for our present purpose. The six series of vowel change according to Brugmann (i, p. 248) are :—

(i) e series : 0, e, o, ê, ô.
(ii) ê series : 0, æ[1], ê, ô.
(iii) â series : 0, æ, â, ô.
(iv) ô series : 0, æ, ô.
(v) a series : 0, a(o), â, ô.
(vi) o series : 0, o, ô.

These are the postulated Proto-Aryan representatives, which are varied according to the vowel

[1] This æ or ə appears generally as î.

system peculiar to each of the Aryan languages. Sanskrit, for instance, does not distinguish in writing between ĕ, ŏ, ă, and it represents long ê, â and ô by â. It has, on the other hand, the advantage of a separate sign for the sonant *ri* and *li*. In Latin the vowels are written differently in different periods of the language. In Gothic ĕ and ŏ are missing, and represented at once by ĭ and ŭ, though differing probably in pronunciation.

Instances.

(i) Instances of the e series:—Thus in the e series, which is most largely represented, we have in Sanskrit the level form pĕd (written pad) weakened to pd and bd in upabdi (noise), raised to pâd in the high form pâd, nom. sing. pâd, foot, gen. padás. In Greek we have the level form in πεζός, the high form in πόδα, the long form in πούς and πῶς. In Latin we have the corresponding stages in pĕdis, tripŏdare, and pês. In the same series we find the level form of the termination *tri* in pit*ri*, as in pit*rí*shu, the high form in pitárau, the long form pitā̆(r). In Greek we have the level form πατέρα, lowered in πατράσι and πατρός, raised in πατήρ and in compos. πατωρ. In Latin we have only patris and pater; in Gothic we should have fadrs, fadrum, and faðer (O.N). I take ἔχω, Sk. sah, as the level stage, weakened in ἔ-σ-χον, strengthened in ὄχος. Likewise pat, weakened in pap-tur, strengthened in pâtayati; kar, weakened in k*ri*tas and *k*akre, strengthened in akaram and *k*akâra. Budh is strengthened in bodhati and bauddha, and never weakened. Vid is strengthened in veda and vaidya, and never

weakened. In Gothic, the level form which we find in stig-um, is raised to steig-a, lengthened in staig; as bud-um is raised to biuda and bauþ, but never weakened. The root bend appears on its level-stage in binda (*bandha), on its high-stage in band (Sk. babandha), on its low-stage in bundum (for budum). In Greek we have *μένω, μονή* and *μίμ-νω, τένω, τόνος*, and *τατός*; *ἔλιπον, λείπω* and *λέλοιπα*; *ἔφυγον* and *φεύγω*. In Latin perfĭdus, fĭdo and foedus, &c.

(ii) Instances of the ê series:—Dádhâmi, *τίθημι*, Gothic gadêths, weakened in dadhmás, *τίθ(ε)μεν*, in hitás, *θετός*, strengthened in *θωμός*, in Gothic dôms.

(iii) Instances of the â series:—Dor. *ἵσταμι, ἔσταν*, tish*th*âmi, ásthâm, weakened in sthitá, *στατός*, status, tasthúr.

(iv) Instances of the ô series:—Dádâmi, ádâm, *δίδωμι, ἔδων*, donum, weakened in ádita, *δοτός*, datus, in dadmás, *δίδ(ο)μεν*, dattás; strengthening impossible.

(v) Instances of the a series:—Á*g*âmi, *ἄγω*, ago, weakened in a*g*ás, *ἀγός*, in *g*man, *ὄγμος* (?), strengthened in â*g*is, *στρατηγός*, ambâges. Yá*g*âmi, *ἄζομαι*, weakened in ish*tá*, î*g*úr, strengthened in iyâ*g*a, ayâkshit.

(vi) Instances of the o series:—Root od, in *ὄζει*, odor, oleo, strengthened in *ὄδωδε*. Stem go (gau), *βόες*, bŏvis, strengthened in gâús, *βοῦς*, bôs, weakened in sugús.

Whoever recollects Bopp's review of Grimm's German Grammar, will be surprised at the progress that has been made in a systematic treatment of these vowel changes in the principal Aryan languages. But he will nevertheless admire Bopp's sagacity, even when we know now that he was on

a wrong road, and he will probably be startled at the extraordinary mastery of facts displayed by the ancient Sanskrit grammarians who in the end became the best guides of such scholars as Holtzmann, Benfey and others in helping them to unravel the confused web of the ancient accents, and using that thread in their bold exploration of the labyrinth of the Aryan vowel changes. It is easy now to sneer at Bopp's work, and to say 'that a broad and heavy mantle of charity needs to be drawn over it.' Those who like myself have lived through all the stages of these controversies, who have in turn been followers of Grimm, of Bopp, of Holtzmann, Benfey, De Saussure, Brugmann, and Hübschmann, know how difficult it often was to advance from one point of view to another, nay, how long they had to labour before they mastered the simplest elements of the Sanskrit accent, as explained in Boehtlingk's Versuch in 1843, and in my Sanskrit Grammar (1886), and how difficult it often was to shake off as no longer tenable what for many years they had held as absolute truth. It is sometimes quite as difficult to give up what for many years one has held to be true as to learn a new truth or a new terminology. It is all the more pleasant to read a work like Bechtel's excellent Indogermanische Lautlehre, 1892, where a sketch of the labours of successive scholars is given, so far as the treatment of vowels and consonants is concerned, and where, though we see how much of the work of Grimm, Bopp, Schleicher and others has now become antiquated, never a word is uttered of disparagement; on the contrary, credit is given for all honest work, whether its results are at present accepted or rejected.

Assimilation, J. Schmidt.

Nor is there likely to be peace or rather rest, not to say stagnation, for some time to come. The march of the army of comparative philologists is going on as brisk as ever, and some of the latest discoveries of Hübschmann and Brugmann have by this time been left far behind by new discoveries. It was seen that the rules of the Ablaut, of the weakening and strengthening of vowels, however minutely worked out by our best scholars, were broken when we least expected it (Noreen, Abriss, § 11). As no exception could well be tolerated, reasons had to be discovered for these exceptions, and one of these reasons, viz. assimilation of vowels, has of late been very fully treated by Professor J. Schmidt, in Kuhn's Zeitschrift, xxxii, p. 321 seq. We must remember, first of all, that the representation of the three vowels comprehended under the Sk. ă, namely the ε, ο, α in Greek, and their corresponding sounds in the other Aryan languages, has never been reduced as yet to anything like law and order. Why we say φέρομεν but φέρετε, why we say ἕβδομος and septimus for Sk. saptama, we cannot tell. In Sanskrit we have the practical rule that before m and v the final a of the verbal stem is lengthened. But why we have to say bharâmi, bharâmas and bharâvas, but bharasi and bharati, even the old Sanskrit grammarians cannot tell us. It is easy to say that it is due to the influence of the consonants m and v, but what is the nature of that influence? One thing only is clear, whatever the cause may have been, its effects had begun to appear before Greek and Sanskrit were com-

pletely separated, for the Greek o is here the regular representative of the Sk. â, particularly in words where â represents the V*ri*ddhi stage.

Sometimes it would seem that ε and o were used simply for the sake of differentiating closely allied roots. Thus I have little doubt that the root of ὄζω, ὀδ, was originally, as pointed out by Benfey, the same as that of ἐσθίω (Or. und Occid., vol. i, p. 626), i. e. ἐδ. Taste and smell are very nearly allied. A thing that eats well, tastes well, smacks well (schmeckt gut). For the sake of differentiating the two meanings, the vowel of the root was in very distant times differentiated, giving us for eating ádmi in Sanskrit, ἔδομαι, ἐδωδή in Greek, itan, at, êtum in Gothic; for smelling, in Greek, ὄζω, ὄδωδα, in Latin, odefacio and olefacio, odor, &c. Instead of ἐδωδή we should, according to Schmidt's rule, expect ὀδωδή, but in order to keep the derivatives of the two varieties of the root apart, ἐδωδή may have been allowed to keep its ε. But this is not all. There are many words, particularly in Greek, where α, ε, o interchange, sometimes in classical Greek, sometimes in the Greek dialects. Here, too, certain rules prevail, or, to speak more cautiously, here too some observations have been made which to a certain extent account for these changes.

Thus, as Professor Schmidt has lately shown[1], (i) ε should be assimilated to a following o, if unaccented, and if followed by λ, ρ, μ, F, λλ, δ, and κ. Hence we find ὀβολός by the side of ὀβελός as in ὀβελίσκος, αἰόλος (originally αἰολός) by the side of ἀίελος in αἰέλουρος, and αιλουρος. We find ἔβδομος

[1] Kuhn's Zeitschrift, xxxii, p. 321.

for ἔβδεμος as in ἑβδεμήκοντα, ἑβδεμαῖον, &c. There is πτόλεμος and τριπτόλομος, πτολεμαῖος and πτολομαῖος. Ἀπέλλων should therefore be looked upon as more original than Ἀπόλλων, Ἐρχομενός than Ὀρχομενός, Δελφοί than Δολφοί, just as φρένες is more original than φρονες in πρόφρονες, and the Aeolic ἔδοντες, teeth, more original than ὀδόντες, the eaters.

(ii) Schmidt's second observation refers to words in which ε becomes ο before originally accented υ, such as κέρκυρα changed to κόρκυρα.

(iii) E, if unaccented, is assimilated by following α; e. g. Ἐκαδήμεια becomes Ἀκαδήμεια, Ζελαμίνιος Σαλαμίνιος, Κεσάνδρα Κασάνδρα.

(iv) A is assimilated to ε, if ε is unaccented; e. g. ἀρετή becomes ἐρετή, ἄτερ and ἀτάρ become ἕτερος, ἀγχέλυος becomes ἐγχέλυος.

(v) Unaccented α is assimilated to following ο; e. g. ἀμέργω and ὀμόργνυμι; σαφής and σοφός; ἅμα and ὁμός.

(vi) A (before or after ρ, λ) is assimilated to ο, particularly if followed directly or indirectly by υ and ϝο, provided the α was originally a heightened ε; for instance, ὀρθός from *ϝαρθϝός, ὄργυια, ὄρνυμι, στόρνυμι, ὄλλυμι. In all these cases we expect ἀρ and ἀλ, for Sk. *ri*, just as for V*ri*tra, we expected Ἀρθρός, but find Ὄρθρος. That the restriction of being followed directly or indirectly by υ or ϝο, is not always observed, is shown by the retention of the ο of ὄρνυμι in ὄρσεο, ὄρση, by Ὀρθία (not ûrdhva) and by Ὄρθρος instead of Ἄρθρος = Sk. V*ri*tra.

(vii) Initial unaccented ο is assimilated to α; e. g. ὀστακός, crab, and ἀστακός; ὀστράγαλος became ἀστράγαλος; ὀδαγμός and ἀδαγμός (cf. ὀδάξ).

In conclusion Schmidt gives some cases where a vowel seems to have been influenced by a preceding vowel, but these cases are, as he admits himself, very doubtful. Nor can we look on any one even of Schmidt's surer observations as more than phonetic tendencies which require to be justified in every single case. The minute conditions to which every one of them is liable, show by themselves how many undercurrents there are which may either favour or counteract such tendencies. Still by an accumulation of instances and counter-instances Schmidt and Noreen have widened our view, and shown how many circumstances have to be taken into account before we can declare positively that the presence of a vowel such as *a*, *e*, *o*, either confirms or forbids the identification of words in Sanskrit, Greek, and Latin.

Consonants.

It has often been asked whether, for etymological purposes, vowels are more important or consonants. Such a question is really foolish. At first sight the consonantal skeleton of a word may seem more important, and, as prima facie evidence, consonants are no doubt more helpful than vowels. When we see Latin pater and Sk. pitar, we are at once impressed by their consonantal similarity, and we feel inclined to waive any dissimilarity of vowels. Still, unless other cases could be produced in which a Latin a is represented by Sk. i, there are scholars who would insist that the two words pater and pitar, in spite of the identity of their meaning and in spite of the identity of their consonantal outline,

could not possibly be traced back to the same source. This seems to be going too far. Anyhow, it should be considered whether it was likely that the idea of father should have been expressed by words derived by the same suffix from two distinct roots, varying from each other in the colour of one of their vowels only. In the days preceding the discovery of Verner's Law, it would have been much more justifiable, as I pointed out before, to doubt the etymological relationship of Gothic fadar and Latin pater, on account of the absence of the aspiration of the dental, as required by Grimm's Law; but I do not recollect any such protest being raised against it, common sense in this case, as in others, fortunately proving stronger than respect for phonetic laws. In the course of a long life I have myself been blamed and ridiculed sometimes for too blind an observance of phonetic laws. I well remember how men of considerable literary eminence represented it as the height of scholastic pedantry to deny any relationship between such words as καλεῖν and to call, cura and care, Dame in Dame Dieu and Damn! Nor have I on the other side escaped severe blame for having ventured, in defiance of all phonetic restrictions, to connect Sk. deva and θεός, Sk. Varuna and Οὐρανός, Sk. Vritrá and Ὄρθρος, Sk. Ahanâ and Ἀθήνη. All here depends on argument. If better etymologies can be suggested for these words than those I have brought forward, there would at once be an end of all controversy, and no one would be better pleased than myself. But though I am well aware of the irregularities involved in these identifications of Sanskrit and Greek words, I have never despaired

of being able to justify them both in their vowels and in their consonants.

The discoveries in the realm of consonants have certainly been quite as important as those in the realm of vowels. In the same way, for instance, as it was found that the Sanskrit alphabet had but one representative for the three shades of the simple vowel, a, e, o, it was found that several of its consonants also possessed more than one power, represented more than one definite sound. Here also the facts themselves were well known to the ancient grammarians of India. They taught, for instance, that some roots ending in ज् *g* and ह् h change their finals into ग् and घ्, while others change them into linguals.

Two kinds of Palatals.

Thus युज् yu*g* forms the participle युक्तः yukta*h*; दुह् duh forms दुग्धः (i. e. dugh + tah); but मृज् m*rig* forms मृष्टः m*rish*ta*h*; लिह् lih forms लीढः lî*dhah*. Every tiro knew these facts, or had to learn them from his Sanskrit Grammar (M. M., §§ 119, 124, 127, 129). The same applies to roots in श् *s*. Though we cannot test this श् *s* in the past participle, because here both दिश् di*s* would form दिष्टः dish*tah* and विश् vi*s*, विष्टः vish*tah*, yet in the nom. sing. दिश् di*s* appears as दिक् dik, but विश् vi*s* as विट् vi*t*. Therefore here also the श् *s* represents two distinct powers. But though these facts were perfectly well known, it was Ascoli who first drew the subtle though important conclusion that when the effects are different, the causes also must be different, or, in other words, that the letters श् *s*, ज् *g*, and ह् h, must represent in Sanskrit two powers, the one guttural,

the other non-guttural, and that they may therefore in cognate languages also be expected to have different representatives. It should be remembered, however, that like other phonetic observations this also is not without exceptions. These exceptions were clearly indicated by Pâ*n*ini, and have to be accepted and taken into account, even though they cannot be accounted for. There are roots in Sanskrit (Pâ*n*. VIII, 2, 33) the final of which is treated both as guttural and as lingual. This applies to such roots as द्रुह् druh, मुह् muh, स्नुह् snuh, स्निह् snih. We find, therefore, both ध्रुक् dhruk and ध्रुट् dhru*t*, both द्रुग्धः drugdha*h* and द्रूढः drû*dhah*, मुग्धः mugdha*h* and मूढः mû*dhah*. We find likewise from यज् ya*g* both ऋत्विक् *ri*tvik and देवेट् deve*t*; from नस् na*s* both नक् nak and नट् na*t*. Again, there are roots in Sanskrit the final of which is treated both as guttural and as dental. These are mentioned by Pâ*n*ini (VIII, 2, 34). They are नह् nah and अह् ah. Language here, as elsewhere, asserts its dialectic freedom against rules and analogies. We look in vain for a reason, whether phonetic or otherwise, and must learn to accept facts such as they are, even though we are unable to account for them. As these so-called irregularities are not confined in their effects to the derivatives of these roots in Sanskrit, it follows that they must be referred to the Proto-Aryan period.

What is important, however, is that we shall have to admit in Sanskrit, as well as in other Aryan languages, the existence of a class of consonants which, in order to distinguish them from the ordinary palatals, the च, छ, ज, झ, ञ, and श, *k*, *kh*, *g*, *gh*, *ñ*, and *s*, we may provisionally call Linguo-palatals,

namely the ज *g*, when representing z, and the ह h, when representing zh, and the श *s*, when representing ट *t*. Thus we find corresponding to Sk. *s*atam, Lit. sziṁtas, with assibilated *s*, but Gr. ἑκατόν, Lat. centum, Celt. cêt, with guttural tenuis. Likewise Sk. *g*îr*n*a, where *g* stands for z, which appears as z in Lit. žirnis, Slav. zrino, while Lat. has the guttural media in granum, and Goth. the corresponding tenuis kaurn. Likewise the Sk. h, when it represents an original zh, is represented in Sanskrit by the h in hima, Avestic zima, and therefore by z in Lit. zëmà, Slav. zima, but in Greek by χειμών, in Lat. by hiems, in Celt. by gam. See also Sk. *s*ro*n*is, Lit. szlaunès, Lett. slauna, but Lat. clunis, O. N. hlaun.

Two kinds of Gutturals.

In the same way it was discovered that what were called in Sanskrit the gutturals (ka*nth*ya) represented really two classes of letters, some of them being liable to labialisation (and in Greek to dentalisation), while others were not. The fact that the Sanskrit gutturals k, kh, g, gh are liable to be represented in Greek, Latin, Celtic, and German by labials and dentals, was known from the earliest days of Comparative Philology, for who would have doubted that Sk. kas was Gr. κός and πός, Lat. quis, Cymr. pwy, Goth. hvas, or that Gr. τί corresponded to Lat. quid, Sk. *k*id? No one ever doubted that Sk. pa*ñk*a was Gr. πέντε, Lat. quinque, Cymr. pimp, Goth. fimf, or again that Sk. *k*atvar was Lat. quatuor, Gr. τέσσαρες, Goth. fidvor. But what was even more curious was that the same languages, viz. Sanskrit, Zend, Armenian, Lituanian, and

Slavonic, which, as we saw, possessed the assibilated Linguo-palatals in cases where the other languages, viz. Greek, Italian, and German, presented unassibilated gutturals, resisted also the labialisation or dentalisation of gutturals in cases where the other class of languages allowed it. Thus we find that Sk. *k*a was Lat. que, Cymric -p, Gothic -h, and Gr. τε. But the conditions under which these apparently violent modifications took place were not known, and the merit of having gradually discovered some of them belongs again, I think, to Ascoli, though in conjunction with other scholars, such as Fick, Schmidt, and Brugmann. It was not known before, that there were two classes of languages, one which never labialised or dentalised, and another which never assibilated; nor was it clearly perceived that even the labialising languages do not always labialise their gutturals, and that in this case the fate of the unlabialised gutturals becomes much the same as the fate of the palatals.

Much ingenuity has been spent on the solution of this phonetic problem, and I believe its solution would have become much easier if letters had not been treated here also, as in the case of the Lautverschiebung, as things existing by themselves that can be changed from one language to another. Even the Greek dialects cannot be treated in that way. There is no evidence to show, for instance, that in words like *s*atam, a hundred, and the Greek ἑκατόν, *s* ever became k, or k became *s*. We cannot even realise such an idea, nay, it seems to me to involve a contradiction in itself. We have in the end always to deal with human beings, some of whom, so long as we know, pronounced *s*atam, while

others pronounced katon. One speaker had as much right as another, nor could it be decided by a majority of speakers whether *s* was more original than k, or k than *s*. To say that Sk. *s* becomes Greek k, or vice versâ, seems to me utterly unmeaning, unless we accept it as a mere mode of metaphorical expression, which is more expeditious, and need in that sense not be objected to. Why in the same word the Hindu pronounced *s*, and the Greek k, is a question that cannot be answered, nay, that we have really no right to ask. Who could say whether the q of quinque and the c of Ir. coic were originally p as in πέντε (Proto-Aryan penqe)[1], or whether the initial p was original, and the q a modification of it? A change of p into q is so exceptional that we should hesitate to admit it except in languages which have a decided gutturalising tendency, such as Irish, which changes even pascha into caisc[2].

True, certain concomitant circumstances have been discovered by Fick, Ascoli, and others, which seem to favour or to prevent assibilation and labialisation, but that is very different from saying that we are able to account for such changes. It is very different when, as in Italian, we can say that there is an almost mechanical necessity for our pronouncing c before i or e as ch. Here we have a clear case of Nacheinander, of successive change, though even here the first start may be traced back as far as Umbrian. But in the difference between Sk. *s* and Gr. κ, between Sk. p. and Lat. q, we have clearly a case of Nebeneinander, of parallel dialectic

[1] Brugmann, Grundriss, § 321.

[2] J. Rhys, Lectures on Welsh Philology, p. 373.

modification, which is due to phonetic idiosyncrasies going back to a period previous to the Aryan Separation, and that cannot be further accounted for. The same applies to the labialising and non-labialising of the gutturals. Both have an equal right, and the causes which seem to favour or prevent the process of labialising are only assistant, but not efficient causes. These changes are neither dynamic nor purely mechanical, they are individual, and no more to be accounted for than the dh of dhâ and the d of dâ. They are quite different also from changes due to certain predilections peculiar to one or the other of the Aryan languages in their separate existence, as, for instance, we may truly say that Latin has a predilection for qu, and therefore does not labialise a guttural if it can help it.

Thus, if we take the guttural or palatal of *k*i, we find the labial in *ποινή*, and the dental in *ἀπό-τισις*, corresponding to Sk. *k*iti, *k*ayate, Avest. kaêna. Here Latin would not use p for the initial guttural, and if poena belongs really to this family of words, we shall have to accept it as borrowed from Greek, unless indeed we derive it from a totally different root, the same which in Latin gives us purus, punio, impune, &c. [1]

These phonetic tendencies and idiosyncrasies cannot be used with any amount of safety for historical purposes, except with great caution. If Bopp concluded that the speakers of the assibilating languages must have separated from the parent stem at a later time than the other European languages, he went too far, while Schleicher hardly went far enough

[1] See Chips, vol. iii, p. 193.

when he denied to this fact any historical significance at all, and ascribed it to mere accident. The whole idea of a uniform original language, free as yet from all dialectic peculiarities, is, as I have often tried to show, a mere postulate, unsupported by any evidence, or even by any real analogy. As long as we know anything of any language we know it in a state of dialectic fermentation, and the germs of this dialectic variety as between the great branches of Aryan speech can only be referred to what is called the Pan-Aryan period. That the idea of a pedigree of the Aryan languages is self-contradictory, I think I showed as far back as 1872 [1]. There are dialectic changes which are clearly successive, as when carus becomes cher, or hafoc becomes hawk. But these changes belong to a later and altogether different phase; they are mechanical and are produced with almost mechanical precision, while the old dialectic varieties as between Sanskrit, Greek, Latin and German (particularly the changes included under the name of Lautverschiebung), cannot be accounted for as successive mechanical changes or so-called corruptions, but have to be accepted as we accept other facts of language, as collateral varieties and as purely spontaneous. It is Ascoli's and Fick's great merit to have accounted for some of these variations, and their observations possess therefore great practical usefulness. They help us to distinguish between the fates of what used to be called gutturals and palatals, and to distinguish again among gutturals between those that are liable to labialisation and those that are not; but more than that they cannot do.

[1] Strassburg Lecture, see Chips, vol. iii, p. 174.

We know now that there is a whole class of languages which never labialise or dentalise, and that in certain words even the labialising languages abstain from labialising their gutturals. The rules to be observed are therefore that in the assibilating languages, the linguo-palatals appear in—

Sk.	Avestic.	Lit.	Slav.
as श् *s* (or ष् sh)	s, š	s (sz)	s
as ज् *g* (for ž)	z, ž	ž	z
as ह् h (for žh)	z	ž	z

but in the non-assibilating languages—

Gk.	Lat.	Celtic.	Ger.
as κ	c	c	k, χ, g, γ
as γ	g	g	k
as χ	h, g	g	g, γ

In the non-assibilating but labialising languages, the true gutturals appear in—

Gk.	Lat.	Ir.	Brit.	Ger.	
as κ, π, τ (σ)	(not p) c[1], qu	c	p	χw[2], w, χ, γ, f, ƀ	in Sk., Zend, Lit., & Slav. as gutturals
as γ, β, δ (ζ)	g, gu, v	g, b	b, g	k, kw, p	
as χ, φ, θ	gu, v, b, f	g, b	b, g	w, γ, (ƀ)	

The gutturals liable to labialisation are sometimes written and printed q, g, gh. This might be useful if generally adopted, but the difficulty is to get the types when they are wanted. In words where the non-assibilating (but labialising) languages do not labialise their gutturals, these gutturals have the same fate as the gutturals and what we call the palatals in the assibilating languages.—

Sk.	Gk.	Lat.	Ir.	Brit.	Ger.	Lit.	Slav.
क् k, श् *s*, च् *k*	κ	c	c	c	k, χ, g, γ	k	k, č, c
ग् g, ज् *g*	γ	g	g	g	k	g	g, dž, dz
(ख् kh) घ् gh	χ	h, g	g	g	g, γ	g	g, dž, dz

[1] Brugmann, i, p. 323, note 4; as to b = g, see p. 324.

[2] The w is meant for Brugmann's u̯, the γ for ɣ.

I have retained throughout the old names of Gutturals, Palatals, and Linguals, not because I consider them perfect names, but because there is a very strong objection to changing technical terms, except when there is an absolute necessity for it, and where they can be replaced by other technical terms which are really perfect. No one who attempts to pronounce in succession ka, ke, ki, ko, ku, can fail to perceive that the point of contact in what Sanskrit grammarians call the upper instrument is not the guttur, but that it is shifted to the velum, from the velum to the soft and even the hard palate. Guttural as a translation of ka*nth*ya was meant to comprehend all these various contacts. But a far more correct name would have been *G*ihvâmûlîya, Tongue-root letters, because, however much the upper instrument may vary in the production of the gutturals, the root or the lower part of the tongue is the essential element in the formation of this large class of letters. What is against this term is that it is Sanskrit, and rather too long, but Radical would by no means be an objectionable term. Tâlavya or Palatal has generally been used to signify the mouillé sounds of ch and j in church and join.

Velar may be as good a term as guttural, particularly if restricted to gutturals liable to labialisation, but it is not sufficiently definite, for it is quite possible for a man who has lost the velum, to pronounce these so-called velar-consonants. Lingual is no doubt a very bad term, still it is not quite so absurd as cerebral, which is a mere mis-translation of mûrdhanya. I had many years ago suggested Cacuminal as a more correct translation of mûrdhanya, but I am quite willing to retain lingual, if only it is

understood that lingual comprises not only the six mûrdhanya letters (ट्, ठ्, ड्, ढ्, ष्, ष्), but likewise the linguo-palatals, the *s*, z, zh, which in Sanskrit are hidden under the form of श्, ज्, and ह्.

Useful as these observations undoubtedly have proved, we have to confess that the cause which produced the variety of the gutturals in different Aryan languages remains as great a mystery as ever. Why a guttural tenuis should in Sanskrit appear not only as क् k, but also as च् *k*, and श् *s*, is impossible to say, except when the influence of a vowel can be traced. Again, it is very difficult to understand why the sounds of a sonant श् *s*, and of an aspirated sonant श् *s*, the z and zh, which must have existed in the most ancient period of Sanskrit by the side of the surd श् *s* (and *s* aspir.), should have run into the sounds of ज् *g* and ह् h; or, if not, should at all events in writing have been represented by these letters.

Phonetically the non-sonant palatal sibilant, the श्, would seem to have really represented the sound of ch in the German ich, and we know how in German also ik and ich represent dialectic variations, while as a matter of fact foreigners often find it extremely difficult to catch and pronounce the sound of ch after i, and pronounce ish (इष्) instead of ich. But all this does not explain the fact that certain k's remain unchanged in Sanskrit under exactly the same circumstances under which others are changed. We have both क् k and श् *s* before any vowel and consonant, so much so that it almost seems as if the chief object of the change of the guttural into श् *s* and च् *k* had been differentiation of meaning. The change of क् into च्, which is restricted to Sanskrit and Zend, may be due to the real

presence of an i or to the supposed presence of a palatal ĕ after it. It is of less interest to us because it concerns Sanskrit and Zend only, just as the dentalisation of certain gutturals is restricted to Greek. It is in fact a merely mechanical process, like the change of c into ch, of g into j in the Romance, or of k and g into č, and dz (afterwards ž) in the Slavonic languages.

The change of क् k into श् *s*, of ग् g into ज् *g*, of घ् gh into ह् h, seems to me to be of a different character, if indeed we may call it a change at all, instead of accepting it as a mere parallelism. Its effects extend beyond Sanskrit and Zend, and affect Armenian, Lituanian, and Slavonic as well. If the palatalising change was due to the softening influence of a palatal vowel, whether i or e, on a preceding guttural, the assibilation admits of no such explanation, but can only be traced back to a peculiar conformation of the phonetic organs among the ancestors of the Lettic and Slavonic races as well as of Hindus and Persians. If we consider how powerful in ancient times the influence of a single individual may become, whether by imitation or by heredity, how easily certain peculiarities of pronunciation may be perpetuated by some members of a family while others are dropped, we need not multiply hypotheses beyond necessity, and imagine that certain branches were separated sooner or later from the parent stock, or that certain consonants were first infected and then healed again, for we must never forget in all these researches that we have not to deal with consonants and vowels that are pronounced, but with human individuals who pronounce them, and who may vary their pronunciation, often owing to mere

whims or to organic faults. Some people lisp, others mumble and speak with their mouths almost closed. In the same way palatalisation and labialisation may have been due with certain classes of the ancient Aryan speakers, as they are with us, to laziness or want of sharpness in pronunciation, perpetuated by heredity. If the breath, instead of being checked sharply by the guttural gate, slides audibly along the soft palate, or if it strikes the labial shutters, before it reaches the air and the ear, we get the parasitical sounds of ky and kw which lead on to the palatalised and labialised gutturals, in various branches of Aryan speech. We can observe just the same modification in English kjind and quarry (for carrière).

Still, though the causes of these changes are difficult to trace and may at first be due to individual accident only, their effect is very definite, and has therefore proved of very great importance and practical utility to the student of etymology.

This is, of course, a very short and imperfect sketch of the principal phonetic rules, established by successive generations of comparative philologists. On most of them there is no longer any dispute, and whenever they are contravened by any etymology of ordinary words in the different branches of the Aryan family of speech, it is incumbent on scholars to give sufficient reasons for the violation of these rules. There are besides a number of more minute rules applying to one or the other of the Aryan languages. On these, however, we need not dwell at present, but point them out when they become of importance in the etymology of certain mythological names.

Application of Phonetic Rules to Proper Names.

A strict observance of phonetic rules has long been considered the sine quâ non of all etymological research. It was said of Bopp and Grimm that they had been the first who, by means of phonetic rules, broke in the wild horses of etymology. This was perfectly true in their time, and yet many of their etymologies have now to be rejected as much too wild. The fact is that the reins of etymology have been considerably tightened since the days of Bopp and Grimm, and there is every prospect that they will be tightened more and more with every new generation of scholars. But I believe that in some cases these same reins will also have to be loosened, if we do not wish our horses to kick and to rear. This, no doubt, will sound very strange to the ears of scholars who believe that phonetic laws are sufficient to solve all the riddles of Comparative Philology. It is easy to say that phonetic rules are sacrosanct and admit of no exception. In principle this is quite true, but in practice it has always been found necessary to limit it considerably. Formerly it was the custom to speak of exceptions to phonetic rules as sporadic cases, or as ἅπαξ λεγόμενα, which might easily be accounted for considering that many a phonetic rule rested itself on two or three instances only. Afterwards analogy, whether it is called true or false, was relied on to account for exceptions which could not otherwise be reduced to law and order, and lastly, a very important proviso was made, that phonetic rules were without exception, provided always that all the circumstances were known to be

the same. But here the great difficulty is to find out in every case whether all the circumstances are really the same, and whether we can prove them to have been the same at the time when certain phonetic changes first came in. I pointed out many years ago that phonetic decay affects most strongly those words which have lost their etymological clearness, which have become purely traditional, have ceased to be appellative, in the true sense of the word, and may be treated as nick-names or proper names rather than as appellatives.

Local Names.

We can best see this in the case of local names, which often break through all the most sacred phonetic laws. No phonetic rules would suffice to help us to discover the original form and meaning of such names as London, York, or Birmingham. We have to trust to history rather than to phonetic rules, to ancient charters rather than to grammars and lists of roots, if we wish to discover the various stages of phonetic change through which such names have passed.

It was very natural, for instance, to discover in Wormingford, the ford of the Wormings, i.e. the sons of Worm, and we all remember how the believers in universal totemism discovered in these sons of Worm [1] the descendants or the worshippers of the worm or the serpent, and therefore the abstainers from worms and serpents as part of their daily food. Phonetically there was nothing to be said against this etymology. But the circumstances were against it. The name of Wormingford is modern, and in

[1] Archaeological Review, iii, 357.

spite of all appearances to the contrary, is corrupt, and has been changed regardless of all phonetic rules. Its old name was Withermondeford, or, as found in Doomsday Book, Widemondefort. These are facts against which phonetic rules are of no avail. No one would derive Worm from Withermonde, or Withermonde from Worm, whether a man or a beast or a totem. No one would build any phonetic rules on the successive changes which Withermondeford underwent before it became Wormingford, and yet no one would protest against their identification, though in defiance of all phonetic rules which govern the transition of old into modern English. Not even the believers in totems and totemism would be able to derive much comfort from these two names, unless they were as devoted believers in totemism as Mr. Gomme, who sees Sandrings in the name of Sandringham, and maintains that it is a well-known fact that some American Indians worship sand as their totem, and, we may suppose, abstain in consequence from eating sand.

Loss of Meaning entails Change of Form.

We can observe two currents in the history of local names. First, they lost their meaning by rapid and careless pronunciation, and secondly, they were endowed with new meanings that seemed to agree with their corrupted form. In English this is particularly the case with Norman words. Thus D'Angerville became Dangerfield, Montfort became Mumford, Marigny both Marney and Morning-thorpe and many more, more or less fanciful, as, for instance, the wild derivation of Portwine from Poitevin, of Sherry from Shirâs, of Cognac from Iconium, of

Barley-sugar from sucre brûlé, and at last sucre d'orge. And what applies to local names applies equally to personal names. Beauchamp is now pronounced and even written Beecham, Belvoir has become Beevor or Beaver, &c.

Christian Names.

And what is strangest of all, Christian names, mostly the names of well-known saints and martyrs, have been tortured in different languages to such a degree that no phonetic rules would give us a key to their secret history.

Among Christian names Cust is said to be a corruption of Constance, Emmot and Empson of Emma, Gill of Juliane [1]. The confusion becomes wilder and wilder if we go into the history of the commonest Christian names, and follow their fates in the different languages of Europe. Jacob or Jacobus was a well-known name with readers of the Old or the New Testament, certainly known quite as well as Hermes, Mercury, or Sârameya, with students of mythology. Nothing could be said against such simple and regular changes of the name as we see in It. Giacobbe, Span. Jacobo. But when we come to Fr. Jacques, It. Giacomo, Span. Jago, Jaime and Diego, Eng. Jeames, James, Jim and Jimmy, our phonetic conscience begins to feel qualms. Neither could any phonetic rules be derived from such violent changes, nor could these changes be reduced to any phonetic principles.

The same applies to the phonetic metamorphoses of Johannes, Joannes into Ital. Giovanni, Gian, Gianni, Span. Juan, Fr. Jean, Germ. Johann and

[1] See Quarterly Review, Jan. 1895.

Hans, Rus. Ivan, Eng. John, Jack and Jock. No phonetic rules would be able to trace the steps by which Richard became Dick; Henry, Hal and Han; Mary, May, Mol, Pol, and Polly; Magdalene, Maud; Mathilda, Maud and Patty; Margarita, Madge, Peg, Meta and Gritty; Adalina, Adèle, Alisa, Else and Ethel. While Francis becomes Franz in Germany, Frances appears as Fanny. Some of these metamorphoses, however, though vouched for by church-registers, are by no means beyond the reach of doubt. That Rob or Robin should be the lineal descendants of Robert or Rupert is clear enough, but if Bob also, and Dob and Pop appear as claimants, they would find it hard to appeal to any phonetic law in support of their high pretensions. And let us remember that all these degenerate descendants claim as their common ancestor so high-sounding a name as HRUODPERAHT, i.e. Glory-bright, changed to Ruotperht in Middle High German, to Ruprecht and Rupert in modern German, nay even to Hob in Hobgoblin. We shall then learn what phonetic catastrophes are possible, nay, have been real in proper names, even in the names of saints. Some of their phonetic changes can, no doubt, be accounted for by analogy, thus as the change of Rob into Hob by the change of Rodger into Hodge, i.e. Hruadger, glory-spear, κλυτότοξος. But there remain many for which it would be hard indeed to find any analogy whatever in the whole realm of human speech, and which nevertheless are fully accredited by historical evidence.

Proper Names in Greek.

Nor is it in comparatively modern languages only that such phonetic riot has taken place. Modern

languages are really under the sway of the strictest phonetic laws, quite as much as Sanskrit and Greek. With regard to Greek proper names, Professor Pott used to say, that sometimes their heads, sometimes their tails, had been bitten off. Nor need we wonder at this. Most of the Greek proper names were so magnificent, so sesquipedalian, that they could hardly have answered their purpose in daily conversation. How could a child always be called by such grandiloquent names as Thrasyboulos, Herodotos, Apollodoros or Aristogeiton? Hence these names were nearly all abridged in order to render them more handy for loving intercourse or stern command.

This led to the introduction of the so-called hypokoristic or coaxing names which have undergone the most violent changes, changes to which no other words would have submitted. They have sometimes lost their heads, as Pompos for Theopompos, Straton for Hippostratos, and often their tails, as Epaphras for Epaphroditos, Polybis for Polybios, Antix for Antigonos, Nikomas for Nikomedes, Kleopas for Kleopatras[1], Sophilos for Sophokles, Thrasyllos for Thrasymados, Zeuxis for Zeuxippos. Some of them are really new formations, like our Tommy for Tom, Johnny for John.

Proper Names of Gods and Heroes.

The same applies to the names of heroes, they also are shortened, and receive new suffixes in their hypokoristic employment. Thus Hêrakles is called Hêryllos, Hêraios, Hêrykalos; Iphianassa, Iphis;

[1] See Fick and Bechtel, Griech. Personennamen, pp. 16–36. Some of these so-called hypokoristic names are dialectic and ancient.

Amphiaraos, Amphis; Bellerophontes, Belleros; Atrometos, Tromes.

Nor are the names of gods exempt from this treatment. We find what may be called coaxing names such as Dêmo for Dêmêter, Eleutho for Eleuthyia, Aphro for Aphrogeneia, Trito for Tritogeneia.

Dialectic varieties of Proper Names.

In some of these cases, however, it is very doubtful whether the coaxing name is really a shortening or modification of the fuller name, and not rather a parallel form of independent origin. Admitting that Dêmo is a shortening of Dêmêter, we can hardly say the same of Dêo, which may be on the contrary a name like Jovis by the side of Jupiter, may in fact be a feminine form of Dyâus corresponding to the dual Dyâvâ, in the Sanskrit Dyâvâ-*pr*ithivî[1]. Erechtheus and Erichthonios look like parallel dialectic varieties, and do not necessitate the admission that Erechtheus was the shortened hypokoristic form of Erichthonios.

Nor do I see that much would have been gained if we supposed that Hermâs, Hermâon, and the Thessal. Hermauos had been shortened on purpose from Hermeias. These names are far more naturally explained as dialectic varieties, quite as much as the Aeol. Poseidan, the Ion. Poseideon, the Arkad. Posoidan, the Thessal. Poteidoun, the Lak. Pohoidan, by the side of the Att. Poseidon. The same applies to other varieties such as Posoida, Poteida, Potida, &c. Why should Kypris be taken as a secondary form as compared with Kyprogeneia, or Aphro as compared with Aphrodîte?

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[1] L. c., p. 376.

Hekate does not seem to presuppose Hekatebolos, nor Phersis, Phersephone, nor Aello, Aellopous. No one would feel inclined to explain Jâson (Ἰάσων) as a shortening of Jasilaos, Jasidemos, or any other compound beginning with ἰασι, in the sense of healing. What these names really teach us is that the gods, being worshipped in different localities, their names, far more than any ordinary words, often preserved their local dialectic colouring. Before we analyse and compare mythological names, we ought to remember how often, particularly in Sanskrit, different suffixes are used after one and the same root, to form substantives of exactly or very nearly the same meaning. From the root sar, to move along, for instance, we find sar-iman and sar-îman, sar-a*t*, sar-a*t*â, sar-a*t*i, and sar-a*n*yŭ, all meaning wind; sar-a*n*í is a path, sár-ma means going; sar-ít is a river, Sar-áyû is the name of a river. Can we doubt then that Sar-a*n*yú, wind, or morning-wind, is but a parallel form of Sar-amâ, and that if the Greek ὁρμή, impetus, German Sturm, corresponds to Sk. sárma, as a fem., it corresponds equally well to Saramâ, the mother of the Sârameya twins?

There is always something sacred about divine names, and we can well understand that Greeks speaking different dialects in their various settlements, should retain the names most familiar to them when speaking of their gods. If we keep this in mind we shall be better able to understand the anomalies in the names of many of the Greek gods. Hermes may presuppose the fuller form Hermeias, but Hermâon, Hermân, and Hermauos are clearly names formed independently, though all from the same stem, which we have in ὁρμή, in Sk. Saramâ

and her offspring Sârameya[1], to my mind one of the best established facts in Comparative Mythology, and worthy of its first discoverer and patron, Adalbert Kuhn.

It is generally admitted that Eileithyia is a name of the same deity as Eleuthyia and Eleutho, but how ei can replace eu, or vice versâ, has never been explained. Facts, however, are facts, whether we can explain them or not, and not even the most determined sceptic would deny that Apollon, Apellon, and Aploun are dialectic varieties of the same name, whatever outcry might be raised against similar changes in other words. We should also take into account a peculiarity in the formation of proper names in Sanskrit, to which I have called attention before. We are generally inclined to look upon a proper name as something settled once for all, as a mark that cannot be altered without losing its character, as something no longer significative, but purely indicative. But that is not the case, least of all in Sanskrit. Here *K*andrasena, *K*andradatta are as good as *K*andragupta. We have a striking example of this in the name of Buddha's wife. She is called Yasodharâ, i.e. glory-bearing, in Pâli, and likewise in Sanskrit, but by the side of this name we also find Yaso-vatî, glorious, while Yaso-dâ, glory-giving, is the name of the wife of Mahâvîra among the *G*ainas[2]. And what we see in India, even in the case of living persons, we see again and again in the names of Greek mythology. It makes no

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[1] As to the elision of the middle vowel, see Harpyiae and Arepyiae, Fick, Griech. Personennamen, p. 467.

[2] Senart, Légende du Buddha, p. 306.

difference whether the mother of Jâson, for instance, is called Polymêle or Polymêde or Polyphême. Nay, she is recognised even under other names, such as Alkimêde and Amphinome, to say nothing of quite independent names, such as Arne, Skarphe, and Rhoio. Instead of Eurynome, the mother of the Charites, we find Eurymedousa, Eunomia and several other names[1]. All these are facts that cannot be ignored.

But if I mention these and similar anomalies, it is not in order to place the comparison and etymologies of mythological names completely beyond the reach of phonetic laws. Far from it. But at the same time laws cannot supersede facts, and the anomalous changes in the names of ancient deities should not be ignored by any conscientious student. If facts teach us that it is exceptional for proper and local names to follow the same phonetic rules as appellative nouns, the cases in which the proper names of gods and heroes are changed in strict accordance with phonetic laws should be looked upon as fortunate rather than as what we have a right to expect. Dialectic peculiarities, if carefully studied, are much more likely to throw light on the varieties of mythological names than the universal phonetic rules derived from the classical languages whether of the Aryan or the Semitic family.

With all this there is little danger of our drifting back into the etymologies of mythological names that were favoured by ancient Greek grammarians, or are even now seriously put forward by classical scholars, to say nothing of the wild guesses of

[1] Gerhard, Griech. Mythologie, s. v.

Semitic scholars in the seventeenth and again in the nineteenth century. We shall hardly hear again of Persians being derived from Perseus, Medians from Mêdeia, or Ionians from Ion. Nor is Apollon likely to be explained once more as the destroyer, from *ἀπολλύναι*, because Aeschylus in the Agamemnon, v. 1080, said :—

> *Ἄπολλον Ἄπολλον*
> *ἀγυιᾶτ' ἀπόλλων ἐμός.*
> *ἀπώλεσας γὰρ οὐ μόλις τὸ δεύτερον.*

The ancients may be pardoned for an etymology of Helena such as we find in the Agamemnon of Aeschylus, v. 681 :—

> *Τίς ποτ' ὠνόμαζεν ὧδ'*
> *ἐς τὸ πᾶν ἐτητύμως—*
> *μή τις ὄντιν' οὐχ ὁρῶ-*
> *μεν προνοίαισι τοῦ πεπρωμένου*
> *γλῶσσαν ἐν τύχᾳ νέμων ;—*
> *τὰν δορίγαμβρον ἀμφινεικῆ θ' Ἑλέναν*
> *ἐπεὶ πρεπόντως*
> *ἑλένας, ἕλανδρος, ἑλέπτολις. . . .*

New Etymologies by Professor Bechtel. Dionysos.

The ancient Greeks did not hesitate to derive the name of Dionysos from his father (Ζεύς, Διός) and his supposed birthplace Νύση, though what the meaning of such a compound could have been, is difficult to say. But I do not think we are much better off when one of the most recent etymologists, Prof. Bechtel, derives the same name from Dios and snutya. What is such a compound to mean? Snu in Sanskrit means to run, to flow, and it is represented in Greek by *νυ*, which appears in *νέω, ἔνευσα*, &c. Snŭta in Sanskrit would mean running, possibly a stream, and snŭtya might be an

adjective of snŭta. As snu is often used with reference to mother milk, snuta might be interpreted as such, and snutya as fed on mother milk. This might lend some weight to Corssen's etymology of nutrix or snutrix. But could Dionysos ever have been called the nursling or suckling of Zeus? Zeus has performed many miracles, he actually became, for a time at least, the parent of Dionysos (μηροτραφής), but he never was conceived as giving the breast to this wonderful suckling. Bechtel therefore proposes to take Dionysos as originally a form of Zeus whose name he bears in the first part of his name. The second part is then derived by him from ναϝω (snávō) to flow. The god, he argues, was called 'the flow of the sky or of light,' and is fundamentally the same as Ζεὺς Νάϊος of Dodona, surrounded by the Ναϝιάδεϛ.

Admitting that snutya in Greek could mean flow, or stream, sky-stream would be a strange name for Dionysos, and his identity with his father or with the source whence he is supposed to flow forth, is again a strong demand on our faith, or rather on our credulity. But what about the phonetic rules? First of all, though the meaning of νάω and νέω is the same, it would be well to keep the two roots apart, as they are kept apart by Curtius, and likewise in Sanskrit in snu and snâ. Thus Curtius derives νότιοϛ, moist, from snâ, not from snu, and likewise νᾶμα, moisture, Νηρεύϛ, &c. Secondly, nothing could be more regular than the change of υ into ϵϝ and ϵυ, as in νέω, νεύω, and νεῦσις. But Prof. Bechtel says nothing to account for the long ῡ of Dionῡsos, though he is aware that this long ῡ is anomalous, and cannot be matched by any other

derivative either of snâ or snu. If his etymology supplied a really successful explanation of the character of Dionysos, this lengthening of the vowel might possibly be condoned, but the suckling of Zeus can hardly claim such indulgence.

Kerberos.

Classical writers had not much to say as to the etymology of Kerberos, still the statement of Aristarchos at Odyss. xi, 14, that there was for Κιμμέριοι another reading Κερβέριοι, did serve as a useful hint, and led Liddell and Scott in their Greek Dictionary to suggest Darkling as the original meaning of Κέρβερος.

Bechtel, however, who is not generally enamoured of mythological etymologies, declares positively that κέρβερος belongs to a root κερβ = *serg*, to be stiff, from which also κόρυμβος, the uppermost point or head, κρωβύλος, tuft of hair, and Sk. *sriṅga*, horn. Supposing that ἐρος in κολερός stands for ἔρος, wool, he takes κέρβερος for stiff-woolled. Admitting that Kerberos or dogs in general had wool instead of hair, κολο + Fερος would surely become κολοFερος and κόλουρος (Brugmann, vol. ii, p. 45), rather than κολερός.

And might κολερός not be taken as a parallel formation of κόλος, i. e. docked, hornless, without any reference to ἔρος, wool? As to a root *serg*, to be stiff, it has certainly left few traces in Greek or Sanskrit, for, as Curtius already saw, κόρυμβος may, like κόρος, κόρυθος, and like κορυφή, go back to the same stem as κάρα, head, Sk. *siras*, Lat. cers-brum for ceres-rum, without necessitating the admission in Greek and Latin of a separate root such as *serg*.

Sarvara.

If then we remember that we have in Sanskrit sarvara in the sense of dark, sarvarî in the sense of night, surely even Prof. Bechtel would admit that a knowledge of Sanskrit may sometimes be useful in deciphering the names of Greek mythology, and that it is dangerous to scoff, instead of humbly to seek for truth from whatever quarter it may come to us. On the myth itself more hereafter.

Zeus.

Another curious stratagem of those who, for some reason or other, are opposed to Comparative Mythology, and more particularly to an etymological derivation of Aryan mythological names from Vedic Sanskrit, is to accept everything up to a certain point, and then to draw a line beyond which no one is to go. Most people have somehow learnt that what I called the Lesson of Jupiter, namely the identity of the names of the supreme god Zeus and Jupiter with that of Dyaus in the Veda, can no longer be denied. But they seem to imagine that while the father of gods and men was known under a common name before the Aryan Separation, his wife, his sons and his daughters, his grandsons and granddaughters, belong to a different age or a different country, and they seem to think that no attempt should be made to trace their names back to the same common Aryan period. The strangeness of such a supposition does not seem to strike them, or, if it does, they do not feel bound to account for it. They cannot help indeed allowing to the solitary king of gods a few companions of Aryan extraction, but if there is the slightest flaw in the baptismal

register, their claim to a place in Jove's Olympus is at once denied.

Êos = Ushas.

Êos, the Vedic Ushas, the Lat. Aurora, cannot well be excluded, for she claims to be the daughter of Dyaus, duhitâ divás in the Veda, and the θυγάτηρ Διός in Greek.

Dioskouroi = Divas putrâsah.

I was rather surprised to see that the Διὸς κοῦροι also have been allowed to pass, for their name is not quite the same, nor are the Divas putrâsah, the sons of Dyaus, exactly the same as the Διὸς κοῦροι, while the now favourite identification of these κοῦροι with the Kourêtes seems to me extremely bold, considering that these Kourêtes are known as the priests or servants of Zeus, but not as his sons in the sense in which the Διόσκουροι, Kastor and Polydeukes, have been so called, as the sons of Lêda and of either Zeus or of Tyndareus.

Trîto and Trîtogeneia.

As to Trîto in Trîtogeneia and its comparison with the Vedic Trita, I doubt whether comparative mythologists would accept this present which, on the strength of mere similarity of sound, Professor Bechtel is willing to make them, unless the intermediate links are much more clearly brought out than they have hitherto been. Still less would they be inclined to listen to his emphatic asseveration: 'No other names of gods can be assigned to the Aryan Ursprache, all further attempts to identify the names of Greek and Vedic gods are futile!'

Hêlios, Mêne, and Hestia.

No pope could speak with greater emphasis, and yet soon after, Hêlios (Sâvelios), Mêne, and Hestia, that is, Sun, Moon, and the Fire of the hearth, are recognised as names inherited by the Greeks from their Aryan forefathers. Were these not Devas also? However, we need not be frightened by such brave words, and when we are told that to-day no one would fight for the identity of Hermeias and Sârameya, all I can say in return is that no one would venture to say so who had once more read Kuhn's masterly essay on that subject, as it deserves to be read, marked, and inwardly digested.

Erînys = Sara*n*yû.

It is difficult to discover any real progress in mythological etymology if we are told to-day that Erînys as a name of Dêmêter is derived from ἐρινύω, to be angry, and this from ἐρῐ*F*, in Lat. rîvînus. Rîvînus means ἀντίζηλος, but why? Because, like rîvâlis, it is derived from rîvus, a river, rîvînus and rîvâlis being the name given to people who claim the same water and have in that sense become rivals.

These words have nothing whatever to do with ἐρινύω, to be angry, still less with Erînys. To derive Erînys from ἐρινύω seems to me much the same as if we were to derive Hermes from ἑρμηνεύω, and not ἑρμηνεύω from Hermes or Hermâon, the messenger and interpreter of the gods. What the real conception was which was embodied in Erînys and in the Vedic Sara*n*yû we shall have to consider hereafter. For the present it must suffice to have shown that she can have nothing to do with rîvînus, or with the old Bulgarian rĭvĭnŭ, ἀντίζηλος.

Let us examine a few more of the mythological etymologies of the day, or of Prof. Bechtel.

Hêlios.

Hêlios we are told, from ’Αϝέλιος or ’Αβέλιος, is connected with Goth. savil, Lit. sáulė, sun. True, but the oldest form of all is the Vedic Svar or Suvar, gen. sûras, so that the derivation Sûrya for *Svârya is the very ditto of Hêlios and even of Êelios.

Athêne.

Athêne is explained very simply, no doubt, by Athanatos, the immortal, but how Athanatos was shortened to Athêne, and why Athêne alone was called Athanatos, the immortal, we are not told. A hint only is thrown out that *θᾶνα* may be connected with the Vedic adhvânît. It so happens that adhvânît does not occur in the Rig-veda at all, and ádhvanît only once, VIII, 6, 13, yád asya, manyúh ádhvanît, ‘when his anger ceased.’

I thought it useful to examine a few of these more recent etymologies of mythological names, to show how dangerous it is to attempt them without a knowledge of Sanskrit, and, if possible, of Vedic Sanskrit. That Athêne or Athăna was originally a representative of the light of the morning, then of light and wisdom in general, born from the head of Dyaus (Divo mûrdhnah)[1], and that her name is the same as the Vedic Ahanâ, is as certain as anything can be in comparative mythology. At present, however, I am not concerned in defending it and in answering all the objections that have been

[1] Science of Language, ii, p. 623.

raised against it during the last thirty years ;—this I shall have to do elsewhere. I am only anxious to show that the latest etymologies are not always the best, however confidently they may be advanced. I am not afraid to confess that even if the Greek dentalisation of the h in ah, ahan, and ahanâ could not have been justified, the material coincidences between Ahanâ, as Dawn, and Athêne were far too strong to be upset by this difficulty. We only learn once more how dangerous it is to speak of a phonetic rule as liable to no exception, when the number of cases on which such rules rest is often not more than three or four, so that one single praty-udâharaṇa or counter-instance, would be sufficient to modify or to upset it.

Poseidon.

Much has been said in praise of a new etymology of Poseidon. Fick proposed to connect it with *οἰδέω*, rarely *οἰδάω*, to swell, *οἶδμα*, the swelling of the sea, or the sea itself. With the preposition, *πός* for *ποτί*, *ποϛ-ειδ-άων* is supposed to have meant the swell. The transition of *προτί* to *πρός* is intelligible enough, nor can it be doubted that the Doric *ποτί* takes the place of *προτί*. But it should be remembered that in ancient Doric—(and the name of Potîdas is supposed to be old)—the final *ι* before a vowel is not elided, and if Boeckh admitted it once in Pindar, O. vii, 90, this would probably not be regarded as a valid excuse for Potîdas. Secondly, there is, as far as I know, no other case where *πός* stands as a preposition before a verb. Then there is the real difficulty of the short *ι* in *ποσῐδήιον* which cannot be separated from *ποσειδῶν*. I mention all

this not as in my opinion fatal to the etymology of Poseidon, but only as showing how easy it is to start minute objections to almost any mythological etymology, and how much more difficult to remove them, or to account for them. What makes me hesitate much more before accepting the etymology of Poseidon as the On-sweller is the purely descriptive character of the name of this son of Kronos, though until a better etymology is suggested, which I shall hope to do further on, we may perhaps be allowed under reserve to retain it. I see, however, that Brugmann, though giving all the dialectic varieties of the name, does not endorse Fick's etymology.

Hermes.

That the name of Hermes may, as Prof. Bechtel says, be connected with ὁρμή, and therefore with Sk. sárma*h* will hardly be questioned, but whether ἔρμα in ἔρμ' ὀδυνάων (Il. iv, 117) has anything to do with it, is extremely doubtful. The very verse in which it occurs is known to be suspicious, and though I should not like to adopt the positive tone of classical scholars that ἔρμα cannot have had a meaning akin to ὁρμή, it may be as well to point out that there are other words from which ἔρμα might be derived, whether sar (sero, series), var, to shield, or var, to observe.

Hêre.

Hêre, we are told by Prof. Bechtel, cannot be separated from Hêros, and as Hêros means the protector, she is the protectress in general, the protecting spirit 'in dem alles Schutzgeisterthum sich

einheitlich zusammen fasst,' whatever that may mean. If we should ask why this quintessence of heroism or this incarnation of all protecting spirits should be the declared enemy of the greatest of all heroes, whose very name is connected with her own, we are oracularly told that her enmity to Hêrakles must be understood as 'mythologisch richtig.' Lastly, Hêre's opposition to Zeus, the god of the sky, is explained as an expression of the opposition between the old spirit-faith and the unity of the godhead [1]. Whatever this old spirit-faith may have been, Hêre, as far as we know, was exactly of the same flesh and bone as Zeus. She was the daughter of Kronos and Rheia, nay, she was the sister of Zeus. Zeus was devoted to her, and confided to his sister what he would confide to no one else. Who can forget their marriage as described in the Iliad? She is almost the only legitimate wife among the Olympian gods, hence the protectress of marriage and birth, and her position as *ποτνία*, mistress, as *ὁμόθρονος*, consort, *βασιλίς*, queen, is unquestioned in spite of the matrimonial squabbles which seem to have been as inevitable among the Olympian gods as in the best regulated families on earth. To attempt to explain these amusing squabbles between Zeus and Hêre as remnants of an opposition between Seelenglauben and Gotteseinheit shows a wonderful want of appreciating the poetry of Homer and the human elements that pervade all mythology, and, more particularly, the mythology of the Greeks.

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[1] 'Dagegen hat in ihrem Widerstreben gegen den Himmelsgott der alte Widerspruch des Seelenglaubens mit der Gotteseinheit seinen Ausdruck gefunden.'

Hêre and Svârâ.

We have no satisfactory etymology of hêros, said to be svar-vat, or of Hêrakles, but why Hêre was called Hêre is not difficult to discover. We must not imagine that the Vedic poets can supply us with names for every one of the Greek deities, but much is gained if we can find in the Vedic poetry words and ideas that throw light on the names and concepts of Greek deities. If there was a name in the Veda accurately corresponding to Hêre, it would have been svârâ, that is, an adjective derived from svar with the feminine termination â, and lengthening, of the radical vowel. Now svar in the Veda is the name not only of the bright sun, but likewise of the bright sky. From it an adjective could be formed svarya, contracted to Sûrya, the recognised name for the sun in Sanskrit, while Sûryâ is in the Veda a subordinate and feminine representative of the sunlight. If Zeus was Dyaus, the bright sky, what could be a more appropriate name for his wife than Svârâ, Hêre, the Dea Urania coelestis, originally, it may be, the bright air on which the sky rests? It is easy to say, But there is no such goddess in the Veda. True, neither is there a goddess Hestia in the Veda, yet its etymological connection with the Sk. root vas is recognised by everybody, though on phonetic grounds alone it would be impossible to determine whether it was derived from the root vas, to shine, or the root vas, to dwell[1]. A few more specimens

[1] See Curtius, Grundzüge, p. 399; Roth in K. Z., xix, p. 215; Chips, vol. iv, p. xxvii; Fick, Indog. Wörterb. s. v. vésô, ich weile.

may be useful to show what we may have to expect whenever the etymology of mythological names is left in the hands of scholars who have nothing but contempt for Vedic writings.

Phoibos.

There can be no doubt that Phoibos, whatever its etymology may be, means in Greek pure, bright, radiant, and φοιβάω, to purify. Phoibos was originally the name of an independent deity, but when it became the epithet of Apollon, it meant, what Phoibe meant, when it became the epithet of Artemis, namely brilliant. It need not have been a name of the sun, or of Hêlios, but it certainly was a name that could only be applied to bright, matutinal, or solar deities. I am not ashamed to say that I know of no satisfactory etymology of φοῖβος, but when we are told that φοῖβος meant originally a physician and that the name was applied to Apollon because from the beginning Apollon was the physician of the gods, I cannot follow. Apollon was not from the beginning a physician. On the contrary, he was looked upon as the healer of diseases because, first of all, and very much like the Vedic Rudra, he was supposed to send pestilence and other diseases by his arrows. He who could send sickness was supposed to be able to send healing also. Whether, as we are told, Παιάων branched off from Apollon, or was identified with Apollon at a later time, is a question that I should not venture to answer. But why should φοῖβος have meant a physician? Because it was derived, as we are told, from bhisha*g*. Bhisha*g* in Sanskrit means to heal, bhisha*g*a means healthy, bheshaga*m*, medicine. This

root bhisha*g*[1] is very obscure in Sanskrit, being an anomalous root of two syllables. Pott explained bhishakti as a compound abhi-shakti, meaning he heals. In Sanskrit, however, abhisha*g* means really he curses. That might not be a serious objection, for abhi-sha*g* might well have meant originally to stick something on a wound, or pass the hands over a person to heal him.

Prof. Bechtel, however, takes this root as a simple root and reduces bhish-na-*g*, or bhish-a-*g* to bhish*g*, or rather bhesh*g*, originally bhoish*g*, and he sees in this bhoish*g* the etymon of φοῖβος. Passing over the phonetic difficulties, such as the dropping of the sibilant, and the change of a final *g* to b, what can we do with an etymology that would give to φοῖβος the meaning of surgeon (χείρων), but not of bright? As I said before, I am not going to propose a new etymology of Phoibos, but considering the great similarity between the characters of Apollon and Rudra, as pointed out by Kuhn, Bhava, as another name of Rudra, would certainly lend itself to a change from φόβος or φόβιος to φοῖβος, just as φόνος leads to φοινός through φόνιος.

Apollon.

And what shall we say to the new etymology of Apollon which derives this god of light from ἀπειλή, threatening, or Latin ap-pelare? Could a physical god, like Apollon, have in the first instance been called an addresser, from ἀπέλλα, Ansprache (Appell)? We should at all events expect to be told what the connecting-links could have been between the son

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[1] Science of Thought, p. 350.

of Zeus and Lêto, the brother of Artemis, the Delios, and the Addresser, supposing even that such a meaning could be supported by stronger evidence than we have at present.

Ares.

If Ares(ᾰ̂), another son of Zeus and Hêre, could be explained, as we are told, by simply spelling his name with a small ἀ as ἄρης, then why should not Χάρις be explained by χάρις, Ceres by ceres, the Sabine word for bread, and Janus by janua?

Artemis.

Again, if we are asked to derive Artemis, the sister of Apollon, from ἀρτεμής, fresh, hale, one only wonders that the Greeks should ever have been in doubt as to the origin of the names of their gods, and particularly of that of Artemis, the goddess αἰὲν ἀδμήτη, always unwedded. How to account for dialectic forms such as Ἄρταμις-ιτος, and even Ἀρτάμυτι must then be left entirely as an open question.

Aphrodîte.

The most startling etymology, however, which Prof. Bechtel has presented to us is that of Aphrodîte. That the Greeks thought of her as born from the foam of the sea, shows at all events, as well as her names of Brychia, Anadyomene, and Haligeneia, that her rising from the sea was compatible with the traditional conception of that ancient incarnation of beauty and loveliness. As wife of Hêphaistos she is distinctly called Charis, one of the numerous representatives of the Dawn. Her heavenly nature is indicated by the names of Ourania and even of Hêre. Now we are told, however, and in a most persuasive

tone, that the first name given to this goddess of love was connected with fordus, pregnant, and because she encouraged love and marriage, she is supposed to have been celebrated and worshipped as the Pregnant Woman. Fortunately Greek sculptors did not take this view of her, and the very author of this etymology is evidently afraid of the consequences which it would involve. He qualifies it, therefore, as quite uncertain. But he adds, ἀφρός may be a weak form of νεφρός, kidney, though he fortunately passes other possibilities over in silence.

The only possibility which I can see is that this bright and beautiful goddess represented the Dawn, and was therefore by Homer considered worthy of such parents as Zeus and Diône. As rising from the sea, a kind of female Apâm napât, she might, besides the name of Charis, Ourania, and Enalia, have received the name of Aphrogeneia, born from the froth of the sea, unless we take aphros in the sense which abhra has in Sanskrit, namely cloud or sky. This would represent her as what she is, one of the many daughters of the sky. All this shows at all events that Aphrodîte was a beautiful creation of the Greek mind, however much it may afterwards have been contaminated by contact with similar goddesses of the East. To suppose that Astarte was the original of the name of Aphrodîte would be the same as to take Moloch as the original of Zeus Meilichios.

I have given these few mythological etymologies as specimens of what we have to expect from scholars who scoff and sneer at every comparison between Greek and Vedic deities, and at every etymology

that dares to appeal to Sanskrit roots. They dispose of a comparison such as Ouranos = Varu*n*a by calling it a failure, without any attempt to prove it so, nay, they maintain that Erînys cannot be the same word as Sara*n*yû, because it is derived from the Greek ἐρινύω, to be angry. Would they derive δάκρυ from δακρύειν, or ἔρις from ἐρίζειν?

If these are the best specimens of what is called Modern Philology, I confess that I still belong to the dark ages. I am delighted, no doubt, whenever the comparisons of mythological names are in strictest accordance with the phonetic rules that apply to nouns and verbs, but I should consider it simply pharisaical to object to such an equation as Varu*n*a = Οὐρανός considering the similarity, nay almost identity, of Varu*n*a with Ahura Mazda on one side, and of Varu*n*a with Οὐρανὸς εὐρὺς ὕπερθεν, ἀστερόεις, on the other.

So much may suffice to explain my present position with regard to phonetic rules when applied to proper names. I formerly agreed with Curtius that phonetic rules should be used against proper names with the same severity as against ordinary nouns and verbs (Grundzüge, p. 120). I am now convinced that Benfey and others were right in protesting against this extreme view, very much on the strength of facts which could not be accounted for without placing a certain restriction on the universal sway of phonetic rules. I am glad to see Professor Victor Henry expressing the same conviction when he says: 'Mais les altérations de noms propres sont si aisées, et les causes en sont si fuyantes, qu'on ne peut en bonne justice exiger de la mythographie l'observation absolument rigoureuse de la phonétique'

(Quelques Mythes naturalistes, p. 6). Of course this will be called backsliding and many other hard names, but in the end facts generally carry the day, even against scribes and pharisees.

Lest it should be supposed, however, that phonetic rules are like natural laws, and exceptions, entirely contra naturam, I add a few remarks on words which are not proper names, and which nevertheless offend against some fundamental phonetic law.

Let us take such common words as *οὐκ*, not, and *ἐκ*, out. They run counter to a well ascertained principle of the Greek language that no consonants are tolerated in Greek as finals except *ν*, *ρ*, *ς*; yet these two cases *ἐκ* and *οὐκ* (before vowels or at the end of a sentence) are sufficient to upset a rule that seemed to be based on a physical inability on the part of the Greeks to pronounce a final muta, nor has it been possible to detect any reason why this rule should have been broken in these two cases only, particularly as there was *ἐξ* by the side of *ἐκ*, and *οὐ* and *οὐχί* by the side of *οὐκ*.

Anomalous Words of a more Ancient Stratum.

Such anomalies occur most frequently in words of frequent usage, because the very frequency of their usage gave them the power to resist the levelling influences of later phonetic tendencies. In many languages such verbs as, to be, to go, to know, &c., nouns such as father, mother, daughter, &c., adjectives such as good and bad, are mostly irregular, simply because they have retained their ancient forms. Why should the *α* of *πατήρ* and pater, be i in Sk. pitár? Why should *μήτηρ* have the acute on the first, Sk. mâtár on the last syllable? The apparent

irregularities of duhitár and θυγάτηρ have been discussed again and again, for the last time by Bartholomae in K. Z., xxvii, p. 206; yet in spite of all, no one ever doubted the common origin of these words. What can be more different, phonetically, than κν and δν, yet δνόφος is but a variety of κνέφας [1]? What can be more certain than that ἔκητι and ἀέκητι are connected with the Sk. vasât, yet there is as yet no explanation of the final ι after the termination of the ablative? Why did Sk. *k*atvar, four, quatuor, lose its first syllable in Sk. tûrya instead of *k*atûrya, the fourth, and in τράπεζα instead of τετράπεζα? Why is the suffix of *k*aturtha, the fourth, th in Sanskrit, but t in Latin quartus and Greek τέταρτος [2]? All these anomalies, and a hundred more, have simply to be accepted, till more light can be thrown on them, but they could never induce us to doubt the real relationship of such words.

I fully recognise the dangers of such a theory, if it were made an excuse of every kind of phonetic licence, but we must learn to accept facts such as they are. The difference between historic and prehistoric phonetic laws has been recognised by the best scholars from Curtius to Brugmann and Joh. Schmidt, and there is of course no class of words which has a greater right to claim exception from the recognised historic phonetic laws than the oldest mythological names. If a substantial harmony between two characters in cognate languages and cognate mythologies has once been established, the slight phonetic differences which we observe, for instance,

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[1] On κνέφας, ψέφας, δνόφος, see K. Z., xxxii, p. 357.

[2] Brugmann, Grundriss, vol. ii, pp. 229, 473.

between Váruna and Ouranós, must give way. It would of course be quite different if we could prove the independent formation of the Greek name Ouranós from any other root, such as that proposed by Wackernagel, the root varsh, which would make the Greek Ouranós a god of rain (K. Z., xxix, p. 129). In that case the equation Varuna = Οὐρανός would fall at once, just as the equation Hêrakles = Hercules fell, though Mommsen supposed that he could prove the existence of a Roman god Herculus, derived from a postulated Latin hercere, with the same meaning as the Greek ἔρκειν, and attested, as he thought, by horctum and forctum. Grassmann, however (K. Z., xvi, p. 104), had no difficulty in showing that Greek ἔρκειν could never be hercere in Latin, because initial h in Latin never answers to initial spiritus asper in Greek. In such cases respect for phonetic laws regulating the relations between Greek and Latin, is perfectly correct, and the old view which looks upon Heracles, Hercles, Hercoles, and Hercules as various Latin renderings of the Greek Ἡρακλῆς, has very properly been reinstated.

There is one word, to which I must refer once more in order to dispose of it definitely, the Greek θεός, god, which has actually been divorced from the Sk. deva, bright and god, and deus in Latin, simply on the ground of phonetic incompatibility. But with all due respect for phonetic laws, my respect for the logic of facts is too strong, and I have always held [1] that θεός must remain part of the same cluster of words as Ζεύς, Διός, Διώνη δῖος (διϝιος), ἔνδιος, Διόσδοτος (also θεόσδοτος), Πάνδιος, Sk. Dyaus, divya, deva, Lat. Jupiter, Diovis,

[1] Selected Essays, i, p. 215, note B.

Jovis, Diana, deus, Ir. dia, Lit. dẽva, O.N. tívar. Why δ should have become θ I honestly confess that I cannot explain, unless we suppose that the regular representatives of deva in Greek, viz. δέος or δοιός, would have been undistinguishable from δέος, fear, and δοιός, double[1]. The Greek θεός, if not derived from the root div, has found no other root as yet from which it could have been derived, so as to account for its meaning, as well as its form. Wackernagel takes it as originally θεϝός which Bury traces back to the root hu, to sacrifice, i.e. to pour out libations (χέω, χυτός). Brugmann refers it to the same class as ghora, terrible. Schmidt prefers θϝεσος, and traces it back to Lit. dvẽsti, to breathe, dvâsė, spirit (K. Z., xxxii, p. 342). None of these meanings carries conviction, and it seems almost inevitable to treat θεός as an ancient mythological word, and as exceptional on account of its very antiquity. In other languages also, as I pointed out on a former occasion, the words for God show certain irregularities, and the extraordinary pronunciations of God, which may be heard from the pulpits of churches and chapels in England, Scotland, and Wales, nay in America also, give us an idea of what may have happened in ancient times. I was pleased to find that Mr. Edwin Fay, in the American Journal of Philology, has arrived at the same conclusion, and goes so far as to see in the rough breathing of certain words in Greek what he calls a 'reverential pronunciation.'

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[1] A similar cause prevented the change of ἐδωδή into ὀδωδή, see Schmidt in K. Z., xxxii, p. 332, and of ἀγκύλος into ὀγκύλος, ibid. p. 376.

Words with different Etymologies.

In spite of the great advance which has undoubtedly been made in the knowledge of phonetic laws, we often find three or four etymologies of the same word advocated by the most competent scholars. They cannot possibly be all right, and here at all events a consideration of the meaning may claim a certain attention.

Prapides.

The Greek πραπίδες, for instance, has long been a crux to Greek and comparative etymologists. Four etymologies have lately been worked out by four great authorities in phonetic science, but not one of them is really convincing.

M. L. Havet in the Mémoires de la Société des Linguistes, vi, 18, proposed to connect πραπίδες with the Sanskrit k*r*ip, the Latin corpus. Supposing that the phonetic difficulties could all be removed, could we bring ourselves to believe that so characteristic a part of the body as the midriff or diaphragm, the seat of laughter and anger, could ever have been called simply the body? That another name of the πραπίδες, scil. φρένες, should have been used for mind is intelligible enough, because so many affections of the mind seemed to affect the diaphragm (φρένες), but this special function of the diaphragm would have been the very reason why it could not have been called by a name having the general meaning of body.

Prof. Osthoff worked out a much more elaborate etymology. Taking his stand on the German name of the diaphragm, Zwerchfell, i.e. the skin across, he tried to bring about a phonetic reconciliation between

Zwerch and πραπίδες. Zwerch, athwart, he traces back to an Indo-Germanic tu̯ĕrqo. The syllable tv*ri* or tvĕr he traces in the Sk. *k*ătvăr, and this appears as τετρα in τετράκις. In τράπεζα, τρα is supposed to represent an original qτ^{f}ερ, which dwindles down to τ^{f}ερ and to τρ. Hence, if τ^{f}ερ can become τρα, he argues, why not τ^{f}ερqo : τραqo? This τρακ^{w}ο might be assimilated to κρακ^{w}ο, and this, if labialised, would become πραπο. From πραπο a derivative πραπίς, πραπίδος would be formed, and thus all would be right. (Etymologica, p. 761).

Supposing that mechanically all these changes were right, though a change from tw to kw and p is difficult to support by analogies, one does not see why they should have taken place in this one word πραπίδες, while κρακίδες, or even τρατίδες would have answered equally well. Anyhow it would not be difficult to propose other etymologies which would not require the admission of such extremely complicated changes as those which led Osthoff from πραπίδες to Zwerch.

Hence Professor Bechtel proposed, as a third etymology, to connect πραπίδες with Sk. parsu, rib (Kl. Aufs. zur Grammat. der indogerm. Sprachen, 1, 3; Gött. Nachr. 1888, p. 401). Here the phonetic difficulties would no doubt be less, though *s*v ought to become ππ rather than π. The substantial difficulty, however, would still remain, that parsu means rib and not diaphragm, and that we do not even know why the rib itself should have been called parsu.

Professor Windisch suggested a fourth derivation. Tracing back πραπ to perq, he identified perq with Gothic faírhvus, world, but having in other cognate

languages the meaning of soul, mind, and life. Here the phonetic difficulties have been much diminished, but we ask again why did faírhvus mean world, soul, and life, and why should the diaphragm have been called soul or life? We can understand that a word for diaphragm (φρένες) should in time assume the meaning of life or mind, but hardly vice versâ, that a word meaning mind or life, should become the name of the diaphragm.

I give this one instance in order to show that these four etymologies cannot possibly be all right, and that our choice must very much depend on the degree of conviction which the successful explanation of the meaning of a word conveys to our mind.

Analogy and its Limits.

I am quite willing to admit that nothing would justify us in admitting θ in Greek as the regular representative of d in Sanskrit in any word except θεός, as little as I should admit the transition of Sk. *sva* in the middle of a word into ππ, in any word but *asva* and ἵππος, to say nothing about the illegitimate spiritus asper of ἵππος. Nor should I appeal to the transition of δ into θ on Greek soil in the late Boeotic forms οὐθείς and μηθείς for οὐδείς and μηδείς. I accept θεός = deus in the very teeth of the phonetic rules, and I do so chiefly because it belongs to an ancient and almost mythological cluster of words, just as I except ἕβδομος and ὄγδοος from the legitimate influence of phonetic rules, because they belong to a very ancient series of words. There are still many things which we have to accept without being able to account for them. We have to accept ὀφθαλμός, though we cannot account for the aspiration in φθ;

we have to accept ἄστυ for vâstu, though we expect ὄστυ. (Saussure, Système, p. 178.) No excuse can be shown for μέγας = mahân, for ἐγώ = aham, nor for ἕβδομος instead of ἕπτομος, septimus, except an appeal to Ur-indogermanisch in which, instead of septeme, there may have existed a form *sabdma or *saptva. I say there may, and yet I consider this may as quite strong enough to enable us to say that we cannot possibly separate ἕβδομος and ὄγδοος from ἑπτά and ὀκτώ. Brugmann may be right (V. G. i, 469, 3) in conjecturing that in Ur-indogermanisch there existed the form sepdmó or sebdmó, which would account for the Old Slavonic sedmŭ. But this leaves the question of the legitimacy of such a change, it leaves the reason why, as unexplained as the change of δ into θ in θεός. And if the change of ὄκτοος into ὄγδοος is to be accounted for by mere analogy, all one can say is that it may be so, but that it would form a very extreme case and a most dangerous precedent. I have never been able to see how ἕβδομος instead of ἕπτομος could change ὄκτοος into ὄγδοος. If the Greek form were ὄγδομος the irregular form might possibly be ascribed to a desire for analogy, but how that desire should have been satisfied by the change of a guttural tenuis into a guttural media, in analogy with the change of a labial tenuis into a labial media, is not so easy to explain. And if seven reacted on eight, why should it not have reacted on six or five? Analogy explains many things, but it must not be allowed to explain too many [1]. I ask any

[1] Even the well-known ingenuity of Ascoli cannot quite remove the difficulties of ἕβδομος and ὄγδοος. He postulates

unprejudiced scholar, when we read in the Odyssey θείου Ὀδυσῆος, and δίου Ὀδυσσῆος, can we derive δῖος from the root div, and θεῖος from quite another root, whatever it may have been?

Loss of Letters.

I have never been able to doubt that the Sk. asru, tear, is a distant relation of δάκρυ, tear, but I have never denied that the loss of the initial d is without parallel, and against all phonetic rules. So it is, and yet the facts remain as they are; only in order to be historically correct we ought to say that in Proto-Aryan (Ur-indogermanisch) there must have been by the side of the root das, to bite, a parallel root as, to be sharp, to cut, as in acuo, just as there was a root dah by the side of a root ah. Whichever of these two roots came first, the idea to derive from them a name for the sharp or biting drops issuing from our eyes, was one and the same [1], so that we are right in treating the two words in Greek and Sanskrit, to say nothing of Latin and German, as the results of one and the same poetic

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antecedent forms such as septvo and oktvo which in Latin would appear as septuo and octuo, in Greek as ἑβδϝο and ὀγδϝο. He claims the same power which belongs to nasals and sonant fricatives, the power of changing a tenuis into a media, as in δείγμα (δείκνυμι), δόγμα (δοκέω), or ὕβρις (ὑπέρ), for the ϝ, which would change ἕπτϝο into ἕβδο, and ὄκτϝο into ὄγδο. There exists, however, no case in which ϝ has actually produced such a change; even ἵπϝος remains ἵππος. The former existence of a ϝ or v in Latin has been discovered by Ascoli in septua-ginta, in septu-ennis, and in the vulgar forms octuaginta and octuagies. (See La Genesi dell' esponente Greco ταϝο, p. 19 seq.)

[1] A similar metaphor may explain the connection between ὀδύνη and ἔδυνα, K. Z., xxxii, p. 346.

act on the part of the as yet undivided Âryas. If some scholars prefer to admit two creative acts instead of one, I must say, as in the case of θεός, they seem to me to make the chapter of accidents unnecessarily large, and they gain nothing in the end.

Freedom in analysing Mythological Names.

These preliminary remarks were necessary, in order to explain more fully why I do not hesitate to claim in the case of ancient mythological names something of that freedom which, under some name or other, we have to grant even in the case of ordinary appellative nouns. My reason for putting in this claim is by no means a wish for unlimited phonetic licence, but simply a conviction that, as historians of language, we must learn to accept facts, even when they run counter to our own favourite theories.

Local Influence.

There are some other considerations which may help us to clinch this argument. Mythology and folklore are always in their origin local. Hence, when in time certain mythological names become more widely accepted, they often retain something of their first dialectical character. It is the same even now, particularly with proper names. If a man of the name of Smid becomes famous in the North of Germany where Low-German is spoken, no one in the South of Germany would change his name to Schmidt, nor should we in England call him Smith. Beethoven is not changed to Beethof, he remains Beethoven all over Germany, aye all over the world, nor does any one in England speak of

Wagner as Waggoner. I remember the late Professor Welcker being lectured like a schoolboy for having suggested a relationship between Aesopus and Aethiops. How, he was asked, could Greek th, Sk. dh, become s in Greek? Still Welcker's conjecture was by no means the conjecture of a schoolboy. The Homeric name Aithiops is no doubt connected with *αἴθω*, to burn, Sk. idh, and may have been originally intended for people with burnt or dark faces [1], while *αἰθοψ*, as applied to metal and wine, may be translated by fiery or ruddy. It was supposed by many scholars, long before Welcker, that the twofold Aithiopians, mentioned by Homer, were meant for the inhabitants of India, and knowing that India was the richest source of fables which in later times were spread over the whole world, Welcker saw how appropriate such a name as Aithôpos would have been for the fabulous author of Greek fables. No doubt every schoolboy ought to know, as we are told, that th in Greek is totally different from s, but we have only to recollect that the name Aesopos may have been formed in the Aeolic or Doric dialects, and in that case the substitution of s for th would become perfectly regular, nor would the retention of that dialectic form by his admirers all over Greece conflict with what we know in the case of other proper names. The name of Hêsíodos, originally Êsíodos, was the Boeotian name by which the poet became famous, and which he retained throughout, though in his birthplace, Kyme, his name is said to have been Aisíodos. (Fick and Bechtel, Personennamen, p. 4.)

[1] Cf. brant in brant-fox.

What is legitimate in the case of proper names, is equally, nay more legitimate, in the case of the oldest of proper names, the names of gods and half-divine heroes.

Dialectic Varieties of Mythological Names.

But there is still stronger evidence to show that these mythological names are not subject to the same stringent phonetic rules as ordinary words. We find that several of these gods and heroes have two or three different names which it would be quite impossible to explain by the ordinary phonetic rules of Greek, but which have to be accepted as Pan-Aryan varieties. In the case of Ποσειδῶν, for instance, we know that he was also called Hom. Ποσειδάων, Ark. Ποσοιδάν, Lak. Ποοϊδάν, Boeot. Ποτειδάων, and Ποτοιδαίχος [1], also Ποσείδης, Ποσίδης, and Ποτίδας [2]. Now suppose that some etymology or other had been satisfactorily established for Poseidon, and there is at least a plausible form προς + οἰδάω, to swell toward, how could we expect the same etymology to account for Potidas? And yet we can hardly doubt that all these names are dialectic varieties of one and the same typical form. They may with some effort be accounted for by means of the phonetic laws of each special Greek dialect, but they could not be brought into harmony with the phonetic laws that determine the correspondence of Sanskrit and Greek consonants and

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[1] Brugmann, V. G., i, 490, 2 ; cf. Curtius, p. 245, who quotes Fick, i³, 507, from eido, to swell ; cf. Prellwitz, Dict., s. v.

[2] Gerhard, Gr. Myth., 231, 1.

vowels. If the first element corresponds to the Sk. preposition prati, the Greek προτί, this προτί would have suffered changes which have nothing parallel to them in ordinary Greek. According to Baunack we should have to admit nine varieties in Greek, προτί, πορτί, περτί, πρός, ποτί, πότ, πό, πός, and ποί. This is a large allowance, and the question would still have to be left open, whether we have to admit two parallel forms from the beginning, or take the forms without ρ as modifications of the forms with ρ. The Persian forms patiy and paiti favour the former view, but we are driven again to take refuge in Ur-indogermanisch in order to give phonetic reasons for what in each special language would be simply impossible.

Other divine names in Greek which offer perplexing, though probably dialectic, varieties are: Ἀθήνη, Ἀθηναίη, Ἀθηνᾶ, Ἀθάνα, Ἀθᾶνα: Τρῑτώ, Τρῑτωνίς, Τριταία, Τριτογένεια, Τριτόμηνις: Ἑρμῆς, Ἑρμείας, Ἑρμάος: Ἑστία, Ἱστίη: Ἀπόλλων, Ἀπέλλων, Ἀπείλων, Ἄπλοῦν: Ἄρης and Ἄρευς: Ἀφροδίτη, Ἀφρογένεια and Ἀφρώ: Δημήτηρ and Δηώ: Βάκχος, Ἴακχος: Ἄιδης, ἄδης, Ἄις: Διόνυσος, Διώνυσος. In some cases these varieties can be accounted for by general phonetic rules; in others, however, even when the difference is only one between a long and a short vowel, they would upset any etymology, however carefully elaborated. And what applies to Greek mythological names applies likewise to the names of ancient or modern German mythology. If at the present moment, or at all events during the present century, a scholar were to collect the legends about the goddess Holda or Frau Holda, he would hear her name pronounced as Frau Holle, Frau Wolle,

or Frau Rolle, without any respect for phonetic rules; just as even now we can hear St. Bartholomew pronounced Bartlemy, Barklemy, or Bardlemy[1].

All this will help us to understand why phonetic rules which may admit of no exception as between Sanskrit and Greek, must necessarily be modified so as to include the changes which are recognised in the local dialects of every language.

Aspirates, Sonant and Surd.

Nothing, for instance, can be more certain than that, as a rule, a Sanskrit or a Proto-Aryan media ought not in Greek to appear as a tenuis. But it is equally certain that if an Aryan word has once assumed its Greek garb, it is liable to any amount of dialectical change. In Greek itself we find ever so many instances of a tenuis instead of a media, not only in the middle, but also at the beginning of a word. We have not only Ἄρτεμιτ by the side of Ἄρτεμιδ, Θέμιτ by the side of Θέμιδ, or ἀρήγω by the side of ἀρκέω, τήγανον by the side of τήκω, Κάνωβος for Κάνωπος, but we find δάπις instead of τάπις or τάπης, γνάμψαι for κνάμψαι, γνάφαλλον for κνέφαλλον, βατεῖν for πατεῖν, βικρός for πικρός. Even with aspirated tenuis we find dialectically media for tenuis aspirata, as in Βίλιππος for Φίλιππος, Βερενίκη for Φερενίκη.

Such changes, therefore, though exceptional or dialectic only, cannot be deprecated on principle, if they occur in mythological names.

No one has ever doubted that the Greek θ is

[1] Dickens, Martin Chuzzlewit, p. 558.

an aspirated tenuis and not an aspirated media, and therefore phonetically quite distinct from Sk. dh. Nevertheless Greek θ corresponds regularly to Sk. aspirated media dh, which Greek does no longer possess, such as in θυμός = Sk. dhûma, &c. This Greek θ is reduplicated with τ, τίθημι, while dh in Sanskrit is reduplicated with d, da-dhâmi. Grassmann, however, in his essay published in 1863, showed that there are roots which require the admission of an aspirate both as initial and as final, such as DHIGH, in Sk. DIH; and that in Greek, which has no sonant aspirates, this root would appear as either τιχ or θίγ, and not as διχ or dhίγ.

Why this should have been so, why what is media aspirata in Sanskrit, should, when losing its aspiration, be represented in Greek by a tenuis, is difficult to explain with certainty. It may have been due either to the reaction of the final aspirate, which in Greek could be tenuis only, or to the fact that the initial aspirate was at first tenuis aspirata, and therefore its locum tenens a tenuis also.

There may have been, or, as some people might say, there must have been an intermediate stage in which the initial media had not yet become a tenuis, that is to say the root might have been διχ before it became τιχ, though of this there is no trace in the actual language. We find derivatives such as τοῖχος and θιγγάνω, but never any derivatives from διχ [1].

This θιγγάνω, aor. ἔθιγον and θιγεῖν, is quite correct phonetically, yet such was formerly the respect shown for the meaning of words that

[1] Science of Language, ii, p. 269.

Grassmann himself actually hesitated[1] to trace θιγεῖν back to the root DHIGH, simply on account of the difference of meaning. Yet the original sense of digh, to knead, might well, as in m*r*is, have been taken in the more general sense of handling, touching, considering. The same concessions, however, should sometimes be made by semasiologists which have so often to be made by the phonologists.

Mythological Names Prehistoric.

That the Greek language passed through a period of uncertainty as to the best way of representing the sound which in Sanskrit appears as media aspirata, gh, dh, bh, we know from the numerous instances in which in certain roots media and tenuis vary[2]. The very fact that the final aspirate of roots like DHIGH is represented by media as in θιγεῖν, not by tenuis (θικ), shows that its medial character continued to be felt. If then the medial sound, peculiar to the period of transition, was regularly preserved in the final of this class of roots, why should it not formerly[3] have been preserved in the initial also?

Daphne.

If dih leads to τοῖχος, why should not Daphne stand for Taphne, a form phonetically more correct,

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[1] K. Z., xii, p. 125.

[2] On στόμφος and στέμβω, &c., see Science of Language, ii, p. 270.

[3] Grassmann speaks of the transition of the initial media into a tenuis aspirata as a chronological event, K. Z., xii, p. 117: 'Da die Aspirate im Sanskrit weich, im Griechischen, wenigstens von einem gewissen Zeitpunkte an, hart war.'

though extinct in classical Greek? Whenever we try to discover the etymology and the original intention of a mythological name, it seems to me that the first we have to do is to ascertain the class of physical phenomena to which certain names point. In the case of Daphne, I think I have proved that the story of her fleeing before Phoibos (the brilliant sun) and vanishing in his embraces, can be matched by other cognate stories, all pointing to the Dawn as vanishing as soon as the brilliant rays of the rising sun touch her. We have therefore a perfect right to expect in Daphne a name of the Dawn. Then, and then only, comes the question, how the Dawn could be called by such a name as Daphne? That such a name had an etymology, that it was formed with a purpose no true scholar would deny. Let therefore any one produce a better etymology than that which I suggested many years ago, from DAH (*θαγ, ταχ : θαβ, ταφ : δαφ*), and my own will, of course, have to be surrendered. But it must not be forgotten that my etymology explains not only Daphne as a name of the Dawn, but likewise daphne as a name of the laurel-tree into which she was fabled to have been changed [1]. I have always been ready to give up any etymology, provided always that it could be replaced by a better one; but when I consider the fluctuating state of tenuis aspirata and media in Greek (Brugmann, Grundriss, par. 469, 8), when I see actual dialectic changes such as *δάπις* for *τάπης* in the language of Aristophanes and Xenophon, I maintain that until a better etymology, better not only phonetically but

[1] See Science of Language, ii, p. 621.

materially also, can be produced, my own still holds the field.

It is possible to account for the initial media in δάφνη instead of τάφνη even on more general grounds. What Grassmann has shown (K. Z., xii, p. 110) is that when roots having originally an initial and final aspirate, appear in Greek, the initial, deprived of its aspiration, appears as tenuis, the final as aspirate. But if a word was formed before the Aryan languages separated, such a word would hardly have been liable to a rule which is exclusively Greek. Now most mythological names belong to what may be called a prehistoric or pre-ethnic stratum of Aryan speech, and a name such as Dahanâ would appear as Daphanâ or Daphnâ, just as regularly as garbha appears as βρέφος, and as δελφύς also as δελφός in ἀ-δελφός. The root of garbha is g*ri*bh or g*ri*h (according to Grassmann, ghrabh). In a similar way we have βυθμός by the side of πυθμήν, βάπτω by the side of gâhate, and βαθύς, βάθος, βένθος, whether we connect them with gâh (ghâh), or, according to Fick, with bhadh; we have δολιχός by the side of dîrgha or *daregha, &c.

Athêne.

From the same root DAH, or rather from its twin form AH, as seen in ahan, day, I ventured many years ago to derive the name of Athêne, the day-goddess, the goddess of light and wisdom. Many objections were raised, and I have tried to answer them all in my Science of Language, ii, p. 621 seq. As in this case, however, another and a very plausible etymology had been proposed, namely by Professor Benfey, I felt bound to show

why his derivation was phonetically, as well as materially, objectionable[1]. Whenever there is a choice between two etymologies, it becomes necessary that we should show the grounds on which either the one or the other must be rejected.

It was not a new objection that has lately been raised, namely that if Ahanâ is connected with ahan, day, its h requires χ in Greek, and not θ. But I thought I had fully shown on former occasions that with regard to the Sanskrit aspirated media (i. e. Greek aspirated tenuis), there was a time of which the clearest traces are left in Sanskrit, when the h was as yet undetermined locally, and found expression freely either as gh, or dh, or bh. Thus besides nah, we find nabh (nâbhi) and nadh (naddha). Besides grah, we find grabh and gradh (gr*i*dhra). Besides gâh (gâ*dh*a, deep) we find gabh (gabhîra, deep) and gadh (gâdha, ford). In cases like these we ask no longer whether the final h or gh was palatal or velar, or labial or dental, but we take such a root as gadh as an independent type, and derive from it βαθύς, deep, while we derive βάπτω from gâbh (gabh).

If we admit then for ah, as for other roots ending in h, parallel forms ending in gh, dh, or bh, we should have, by the side of ah a root adh, like nadh, by the side of nah. Of this root adh, Athêne would be the perfectly legitimate offspring.

But, it may be fairly asked, is there any trace of such a root as adh, and have we any right to postulate in the root ah the same variety of final letters which we find in grah, nah, and gah,

[1] Natural Religion, pp. 442–445.

all roots ending in h? I admit the weight of this objection, but I believe that one trace at least, however faint, has been preserved of the root with a dental aspirate as final. We know that to speak was by the early Âryas expressed by to shine, to light up, as in bhâmi, I shine, φημί, I speak. We are therefore justified in assigning to ah the original meaning of shining, and in explaining by it the meaning of ahan, day, and of the old perfect present âha, I speak[1]. Now, why is the second person singular of the perfect âha, âttha? If we consult Pân*i*ni, he explains it by a purely mechanical process. In III, 4, 84, he shows that âh is substituted for brû; in VIII, 2, 35, that th is substituted for h in âha. Therefore the second person singular, as it does not take ik, would become âththa, and this, according to the general rule about aspirates becomes âttha. All this is quite right mechanically, but historically it teaches us a far more important lesson, namely, that the final h of ah in âha, had once been a dental element, and might have been represented by th or dh; only that if by dh, then according to Pân*i*ni's rules (M. M., Sansk. Gr., par. 117), the second person singular would have become âddha, and not âttha. Here, then, in an irregular and therefore ancient verb, we find the root ath or adh, the existence of which was doubted, and it was this very root which in probably still more ancient times gave rise to the name of a goddess both of light and speech. Her name in Greek retained the dental element and remained Athêne, while in Sanskrit the same prototype became

[1] Cf. Brugmann, Griech. Etymologien, p. 49.

Ahanâ, as parallel to âha. James Darmesteter, no mean authority on such subjects, goes even further, and connects Athêne with ath in ath-ar, fire, the Zend atar, fire, whence Atharvan, the fire-priest. The root would throughout be the same ah or ath, to shine, to burn; from it ahan, day, Ahanâ, day or morning goddess, atar (cf. ahar), fire [1].

I know, of course, that scholars who are determined to deny any relationship between Sanskrit and classical mythology, will call this very far-fetched. And far-fetched, no doubt, it is, and far-fetched it ought to be. I believe that in âttha, and perhaps in athar and athar-vân, we have the only tangible proof of the final th or dh in the root ah. It might have vanished with the rest. But its unique character makes this form âttha all the more precious. I have tried to explain again and again why the etymology of mythological names has to go back very far for its evidence, and has to pierce into a stratum of what may be called prehistoric Aryan speech. Our phonetic and grammatical laws are derived from observing each of the Aryan languages, as we know it historically, and at a much later time. But these historical layers of speech presuppose layers below layers, and we cannot maintain a priori that the same laws prevailed in them which prevailed in later times. This is fully admitted with regard to the formation of declension and conjugation. Compositions such as are at the bottom of nominal and verbal inflections, could not possibly have been elaborated during the Homeric or Vedic period, and all I plead for is that the same

[1] See Ormazd et Ahriman, p. 34, note.

fact should be admitted with regard to the names of Homeric and Vedic gods and heroes. Even in Homer's time they were not of yesterday, and these names cannot be expected to conform in every respect to the rules of yesterday. We cannot from Greek resources explain the formation of even so simple a name as Ζεύς by the side of Ζήν, Ζῆνος, much less such names as Athêne or Artemis! It should be understood, therefore, that if the etymology of Greek mythological names cannot be carried out according to the general phonetic rules of classical Greek etymology, this is due to the age of mythological names. We know that the phonetic laws of Modern Greek are different from those of Homeric Greek; why should not the phonetic laws of Homeric Greek be different from those which prevailed when the names of Homeric and pre-Homeric gods were being elaborated for the first time?

Evidence necessarily limited.

We should also bear in mind that, according to the nature of the case, some phonetic laws have to rest on very limited evidence, often on two or three cases, for the simple reason that there are no more to be gleaned from the language, such as we know it. Under these circumstances it is quite clear that one single counter-instance would sometimes outweigh the whole evidence on which a phonetic rule is made to rest, or at all events would considerably diminish its force, while, on the other hand, one single word, such as the second person singular of âha, namely âttha, is all that we have to prove that the final letter of that root had once possessed a dental tendency. But for this single

remnant nothing could have been said for the equation Ahanâ and Athêne except that it was possible, while now we can fearlessly affirm that it is founded on real fact, and is phonetically irreproachable.

Ga*n*apâ*th*a.

We might in this respect learn a useful lesson from Sanskrit grammarians. The whole of their grammatical system is built up on what they call Ga*n*as, i.e. classes of words. These classes of words have been carefully collected. The collection began in the Prâtiśâkhyas, was carried on in the Dhâtupâ*th*a, and reached its perfection in Pâ*n*ini's Ga*n*apâ*th*a. For instance, when Pâ*n*ini teaches that certain words, though feminine, take no feminine suffix, he simply says, 'the words svas*ri* et cetera, take no feminine suffix.' This &c. is not a vague expression, but it means that all the words falling under that special rule have been collected in the Ga*n*apâ*th*a under 'svasrâdaya*h*.' And so they are, and this list is meant to be complete. If it was not so at first, it was added to till it became more and more complete. Or, to take another instance, the suffix ika with lengthening of the vowel of the first syllable seems at first very common. But Pâ*n*ini shows that it is restricted to twelve or thirteen words, all of which are found in the Ga*n*a Vasanta et cetera. Hence vâsantika, vârshika, &c., are right, but any other adjective formed in this way from words not comprised in the Ga*n*a would, in Pâ*n*ini's eyes, be wrong or irregular. If any of these ga*n*as or classes are formed according to a general rule, and

comprehend too large a class of words, the Gaṇa is called an Âkṛiti-gaṇa, a formal or general class, and no attempt is made to complete it. All other Gaṇas, however, are meant to comprehend a complete collection of all words to which either a rule or an exception to one of Pâṇini's rules applies.

If we possessed such a Gaṇapâṭha for the comparative grammar of the Aryan languages, many difficulties would long have disappeared. We should know in each case the exact number of words in which, as in Sk. han = θείνω, a Sk. initial *h* is represented in Greek by θ, if followed by a vowel, and we might then simply refer to the Gaṇa θείνω, &c., for our justification. The only work to be done by successive scholars would be either to strike out certain words in a Gaṇa, if found faulty, or to complete it by the addition of new words, or lastly to restrict it by other Gaṇas containing exceptions, such as, for instance, θάνατος[1], where we should expect θένατος.

We might have a Gaṇa showing all the words in which the Sanskrit *ṛi* is represented by αρ; or if this might be treated as an Âkṛiti-gaṇa, another Gaṇa could be added containing the Greek words in which Sk. *ṛi* or ar (originally udâtta) is through assimilation represented by ορ, provided that the ορ is followed, immediately or mediately, by ο or Fο. A third Gaṇa might give exceptions to this rule such as ὀρέγω (*ṛi*(ñ)*g*), μορτός (marta), Ὄρθρος (V*ṛi*tra), &c.

No doubt, such a Gaṇapâṭha would require the co-operation of many scholars, but it would supply

[1] K. Z., xxxi, p. 407.

a safe and permanent foundation to Comparative Philology, second only to that on which the solid edifice of Pâṇini's Sanskrit Grammar has been erected; it would prevent the necessity of repeated discussion of phonetic changes, when settled once for all either by a Gaṇa or by an Âkṛiti-gaṇa.

I am by no means the first who has pointed out the limited character of the evidence on which phonetic rules, or so-called phonetic laws, have often been based. In a very favourable notice of Brugmann's Comparative Grammar, a critic in the Academy (Jan. 6, 1894) remarks:—'The words in the Indo-European language which can be compared with one another with a reasonable amount of certainty is, after all, not very large . . . A question of some importance is suggested by this fact. How can we be sure that the phonetic laws we have ascertained are not subject to numerous exceptions, or rather to the action of other laws with which we are not yet acquainted? . . . And yet a single new etymology might very materially modify the generalisations we have made, and limit the action of our phonetic laws in an unexpected manner.' Another scholar, Mr. E. W. Fay, has lately spoken out even more decidedly. In the American Journal of Philology, vol. xv, no. 4, he writes: 'For a lustrum or two the science of linguistics has advanced on the hypothesis that there are no exceptions to phonetic laws. As an a priori contention this is no better nor worse than all things a priori. Phonetic laws as we have them are the result of our own inductions! The belief in their inviolability depends on our granting a priori several impossible conditions. I can do no better than quote the words

of Bréal on this point (Transact. Am. Phil. Assoc., 1893, p. 21).'

Brisêis.

That I have always been ready, perhaps too ready, to withdraw doubtful mythological etymologies, I have proved on several occasions. The identification of the name of Brisêis, for instance, the daughter of Brises, with the offspring of the Vedic Bṛisaya was very tempting to me. It is said in the Veda that before the bright powers reconquered the light that had been stolen by the Paṇis, they conquered the offspring of Bṛisaya. Achilles, before Troy is conquered and Helen reconquered, carried off the offspring of Brises. At first sight this coincidence may seem purely accidental. But if we remember two well-established facts, first that ancient epic poetry is in its original elements a metamorphosis of mythology, nowhere more than in the Shâhnâmeh, and secondly, that mythology is a metaphorical representation of the phenomena of nature, we gain a background on which the carrying off of the offspring of Bṛisaya assumes much greater significance. It is perfectly true that I forgot for the moment the very old rule that the s between two vowels in Sanskrit ought to have disappeared in Greek, but when I was reminded of this, I at once gave up my identification of Bṛisaya = Brises. I soon discovered, however, that in Bṛisaya the s could not have been the ordinary s, for its retention would have been as anomalous in Sanskrit Bṛisaya as the retention of the s in Greek Brises. If s had been the ordinary s, it would have become sh in Sanskrit, it could not possibly have remained s. We should have had

B*ri*shaya, not B*ri*saya. Hence the s in B*ri*saya, whatever it is, is not an ordinary s, and therefore it need not have followed the ordinary phonetic rule in Greek. We have in fact in Sanskrit not only b*ri*sî, but also barsa and barsva, and the sv in barsva would be correctly represented by a Greek s, as in ἶσος for ἴσσος an original ϝισϝο. Barsva in Sanskrit means anything bulging, a bolster, &c., as, for instance, the alveolar bulge formed by the sockets of the teeth. B*ri*sî has the same meaning, but occurs most frequently as a name for a cushion or bolster. Why could not this have been used metaphorically for the cloud or for the coverlet of the dark night? We can only guess, and are not likely ever to gain perfect light on these ancient riddles. Still there is the fact that the dark monsters against whom Indra fights are constantly represented as shaggy things, as monstra villosa. Barâsî, a rough cloth made of bark (Weber, Ind. Stud., v, p. 439, note), may have been formed from root b*ri*s, like varâha from v*ri*h, and the Zend varesa, hair, which Schmidt compares with Russ. volosis, hair, may well be traced back to b*ri*s, supposing that the s is rightly taken as dental, and not as palatal[1].

As to the meaning of B*ri*saya in the Veda, we know very little. There are two passages only in which the word occurs. In Rig-veda, I, 93, 4, we read that Agni and Soma overcome the offspring of B*ri*saya and (thus) found one light for many; in Rig-veda, VI, 61, 3, Sarasvatî is invoked to strike down all who blaspheme the gods, the offspring of

[1] K. Z., xxxii, p. 386.

every deceitful Brisaya. This shows as clearly as possible that Brisaya belonged to the enemies of the bright gods, to the dark demons of the clouds and of the night, such as Vritra, Sushna and others.

Night and Clouds.

The offspring or daughter of a dark demon may be connected with the darkness of the thunder-cloud, or with that of the night. It has been shown that these two struggles, that of the light of the blue sky against the dark clouds, and that of the sun against the night, different as they seem to us, were conceived by the Vedic poets as one and the same struggle, often carried on by the same bright heroes against the same dark powers. Hence the offspring of Brisaya may be a name either for lightning and rain, breaking from the dark cloud, or for the morning and the dawn, breaking through the dark night. Now it is curious that in Greek mythology also, we know very little of Brisêis. Sometimes, however, she is called Hippodameia, and this is also the name of the wife of the Lapitha Peirithoos. Brisaios is said to have been a name of Dionysos. All this does not help us much. Still it is curious to observe that Gerhard and others, without any hints from comparative mythology, recognised in Brisêis a being connected with the battle of the morning, the original theme of so much mythology and so much epic poetry. On a vase described by Gerhard in his Griechische Vasenbilder, vol. ii, no. 129, he points out by the side of a picture representing Hêrakles as facing Kerberos, another picture representing a veiled woman between two warriors, and he explains her as Brisêis rather than

as Helena or Aethra. Now we must remember that Orthros is the brother of Kerberos, both being the children of Typhâon and Echidna, and both sharing the same fate of being vanquished by Hêrakles. We should also remember that Orthros is the dog of Eurytion, and that both Orthros and Eurytion were killed by Hêrakles, as the Centaur Eurytion, when he insulted another Hippodameia, the wife of Peirithoos, was punished by Peirithoos and Thêseus. Brisêis or Hippodameia belongs therefore to a class of beings who, though connected by their birth with the dark side of nature, belong afterwards (râtrau prabhâtâyâm) to the realm of the bright ones (deva). Their typical representative is the dawn, the daughter of the dark night, the beloved of the rising sun. And to this class I imagine that Brisêis belongs, she being first carried off by Achilles (Aharyu, the hero of the morning) before the serious war between the two armies begins.

Varu*n*a.

It ought never to have been doubted that the name of the ancient Vedic god Varu*n*a corresponds to the Greek Οὐρανός. Formerly it was admitted by everybody that his name was the same as that of Ouranos, the sky, and the ancient god of the sky. But after a time the usual bickerings began. First the accent was said to be different, as if the accent in Greek and Sanskrit was always the same. Then the suffix was said to be different. And so it is. But in how many cases have words of the same meaning been formed by two or three different suffixes[1]! In the U*n*âdi-kosha, II, 74, we are dis-

[1] Not only do suffixes vary, but in Sanskrit we find such

tinctly told that by the side of Varuṇa, the name of the god and of the tree (III, 53), there was another derivative, Varaṇa, equally the name of the god and of the tree. Hence the suffix difficulty between Varuṇa and Οὐρανός disappears, like that between Sanskrit vartaka and Greek ὄρτυξ, and likewise that between Varuṇa and the Avestic Varena, though in this case the phonetic similarity does not prove the material identity of Sk. Varuṇa and Zend Varena. (See J. von Fierlinger, Varena caθρugaoša in K. Z., xxvii, p. 474.)

But even then the phonetic conscience was not at rest. Varuṇa, we are told, could not be Οὐρανός, because Var could never in Greek be represented by οὐρ. How far phonetic conscientiousness may be carried is shown by Wackernagel, who rather than admit the possibility of the equation Varuṇa = Οὐρανός, proposed in K. Z., xxix, 129, to derive Οὐρανός from οὖρον, urine, and this from οὐρέω = Sk. varshayâmi, lit. to rain. Οὐρανός is then supposed to be derived from a hypothetical οὐρή like χλιδανός from χλιδή. Considering that Aeolic varieties such as ὀρανός and ὠρανός are well authenticated, there is no difficulty whatever on Greek soil in identifying Attic οὐρανός with Aeolic ὠρανός. If necessary, the long ω may be explained, as proposed by P. Kretschmar (K. Z., xxxi, p. 444), by a prosthetic vowel, giving ὀϝορανός and ὠρανός, like ἐϝείκοσι for εἴκοσι, though such a form is a phonetic postulate rather than a linguistic reality.

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names as Sanat-Kumâra, Sanatsugâta, and Sanâtana, or Nâgadeva and Nâgasena, used promiscuously for the same person. In Greek we find πατρόκλοιο from πάτροκλος, and πατροκλῆος from πατροκλῆς, and many similar cases.

This syllable var or v*ri* is liable of course to many disguises in Greek, because it may either retain or drop the initial v, and its vowel is heir to all the vicissitudes to which vowels are liable. Thus, to quote from Fick's Dictionary, we have in Sanskrit the following offshoots of the root v*ri*: v*rin*oti, varate, ûr*n*ôti, va-vâra, va-vre; in Greek *Fόρος*, *οὖρος*, *ὁράω*, *ὥρα*, *Fέρυσθαι*, *εὐρύσσασθαι*, *Fρύομαι*. Likewise from the root v*rig* we have in Greek: *Fρέζω*, *Fέργον*, *FέFοργα*, *ὄργανον*.

Attempts have been made from time to time to limit the number of these vowel changes. Some of them, e. g. *ἔοργα*, are due to Ablaut, a process the causes of which, in spite of recent researches, are still involved in great obscurity. Others are due to assimilation or to the dialectic influences which likewise defy as yet any systematic treatment. As far back as 1879, De Saussure (Système primitif des voyelles, p. 262) declared that he would not decide whether in certain cases *ορ* and *ολ* did not represent the Sk. *ri* and *li*, and he quoted a number of examples, and among them *μορτός* = m*ri*tá. Of late there has been a tendency, and an excellent tendency it is, among comparative philologists, to restrict as much as possible the number of legitimate or possible changes of vowels, and to find out under what conditions certain changes are either possible or impossible. Another school, however, represented chiefly by A. Noreen, of Upsala, and other Scandinavian scholars, claims far greater freedom for the vowels in the Indo-European mother-tongue, something, in fact, like what exists in Swedish, where every vowel may change with every other vowel. (Grundriss der Urgermanischen Lautlehre, 1894, § 11, pp. 37–40.)

Professor J. Schmidt, in an important article in one of the last volumes of Kuhn's Zeitschrift (vol. xxxii, 1893), to which I referred before, treats of the assimilation of vowels in close proximity in the same word. He shows that we must distinguish between vowel changes due to Ablaut, as for instance φέρω, φόρος, and others due to assimilation, such as ὀβελίσκος and ὀβολός. And when speaking of the changes of *ri* or of er and el, he too states that instead of their normal representatives in Greek, viz. ἀρ, ἀλ, ρα and λα, we find in ordinary Greek ορ and ολ, in cases when they are followed, whether immediately, or divided by consonants, by υ or *Fo*.

Such a rule, or, we should rather say, such an observation, if delicately handled, may prove very useful, but, like many edged tools, it may prove dangerous in less experienced hands. Professor Schmidt carefully guards himself against being supposed to have laid down a hard and stringent rule by putting in a 'fast,' i. e. 'almost.' This rule applies almost exclusively (fast nur) to an α which before or behind ρ or λ has been reduced from a high-toned ε. 'At a certain time,' he adds (p. 337), 'all unaccented ερ and ελ were assimilated to ο, unless the sense became obscured,' and he illustrates this by the change of vowels in the name of Τορώνη, and afterwards (p. 340) by the names of Ὀρχομενός, Τροφώνιος, and Δελφοί. He mentions himself an exception even in cases where there is no r or l, viz. κογχύλαι for καγκύλαι, and he explains that the α in ἀγκύλος may be due to an aversion for ὀγκύλος, which would thus have become identical with ὀγκύλος, swollen, pompous. Like a true scholar

who has broken new ground, he knows the dangers of a pioneer, and he thinks it right to warn those who simply follow in the footsteps of others, that they must always judge for themselves, because what may be called a phonetic rule is liable to many counteracting influences. People ought to be careful in adducing counter-instances, and the influence of assimilation should be recognised even when it can be proved by few examples only[1]. There may be a phonetic reason why *υ* and *Fo* should react on a preceding vowel and change it to *o*, but such a reason has never been discovered, and the real reason may be found in the r and l, quite as much as in the *υ* and *Fo*. Anyhow, this observation of Professor Schmidt's, so far from forming a valid argument against Varuṇa = Οὐρανός; seems, on the contrary, to confirm it. Besides, the substance of the mythological equation Varuṇa = Οὐρανός, which we shall have to consider hereafter, is far too strong to be neutralised by a slight phonetic irregularity, even if such an irregularity could be proved to exist[2]. I mean that even if the Greek

[1] 'Die zu allen Zeiten kräftigen Gegenströmungen haben sicher viele, vermuthlich sogar die meisten Wirkungen des hier waltenden Gesetzes wieder getilgt, so dass man kaum hoffen darf, diese Gesetze alle ihrem vollen Umfange nach jemals zu ermitteln. Desshalb muss man mit der Aufstellung von Gegenbeispielen sehr vorsichtig sein und Assimilationen auch dann anerkennen, wenn sie nur mit wenigen Fällen zu belegen sind.'

[2] The first who identified Varuṇa and Οὐρανός seems to have been Westergaard (Ind. Stud. iii, 415). Darmesteter, however, established this equation on a firmer basis, dwelling particularly on the adjective of Varena in the Avesta, viz. *k*athrugaoshem and the Vedic adjective of Varuṇa, viz. *k*aturaṣris and

form were Οὐρανός or Οὐραννός, it would still have to be traced back to the same source as Varuṇa. If we were to surrender the equation Varuṇa = οὐρανός ἀστερόεις, other etymologies would soon have to be surrendered likewise.

Orthros.

Thus, for example, the same phonetic difficulty might be urged against the mythological equation of Vṛitra = Ὄρθρος, an equation which, like that of Κέρβερος = Sarbara, has been accepted by the most competent authorities as invulnerable, both on mythological and philological grounds. It is quite true that Ὄρθρος has the acute on the first syllable, while Vṛitrá has the udâtta on the last. But this occurs again and again. Another reason for representing the equation Vṛitrá = Ὄρθρος as untenable, was there being no trace of a former initial digamma in the Greek Ὄρθρος. A word like Ὄρθρος, however, occurs very seldom, nay, according to some, it does not occur, or ought not to occur at all in the whole of Greek literature. Therefore its having possessed an initial digamma, would, under these circumstances, be very difficult to prove or to disprove. But was it not one of the earliest achievements of Comparative Philology to have proved, not only that when there were traces of a digamma in Greek, they could be substantiated by corresponding words in Sanskrit, but likewise that in many cases where Greek had preserved no indications whatever of the labial semi-vowel, whether from inscriptions or

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*k*aturanîka, showing that the first conception of the word was sky with its four corners, or its four cardinal points.

from metrical peculiarities, or from the testimonies of Greek grammarians, its former presence could nevertheless be established by a comparison with Sanskrit? I may refer once more to such well-known cases as ἄνοδμος and ἄοδμος, or to Schmidt's recent article, published in 1893 (K. Z., xxxii, p. 383). But this is not all. We have been informed that the Sk. suffix tra cannot appear in Greek as θρα. I have always held that no Sanskrit suffix can, in the strict sense, appear as a Greek suffix, but such is the variety of suffixes which are meant to serve one and the same purpose, that the same word and the same name may often be formed in two languages, nay even in the same language, with different suffixes. I have therefore never hesitated to represent such words as Ἄρης and Ἄρευς, Ἀθήνη and Ἀθηναίη, and likewise γλυκύς and γλυκερός, νέκυς and νεκρός, λιγύς and λιγερός, as products of the same formative effort; nor is there any reason to doubt that V*ri*-trá in Sanskrit and Ὄρ-θρος in Greek have shared the same cradle (cf. Brugmann, Grundriss, par. 62), though their suffixes vary slightly. As to the initial o of Orthros, whether it is due to assimilation or anything else, it can easily be supported by such words as the epithet of Athêne, which is both Ἐργάνη and Ὀργάνη, showing that under exactly the same circumstances v*ri* can appear as ὀρ or ἀρ or ἐρ. If Ὀργάνη should be treated as an Aeolic form, the same dialectic change (as in μορνάμενος for μαρνάμενος) might of course be claimed for Ὄρθρος. But without appealing to dialectic influences, the identity of ὀρέγω and *ri*(*ñ*)*g*ati cannot be questioned (K. Z., xxxii, p. 348 n.), and if μορτός, mortal, cannot be

identified with m*ri*tá, dead, there is surely the parallel form, Sk. márta, mortal, which is unobjectionable. It has been suggested that if Ὄρθρος should give offence to a phonetic conscience, we might still take it as a parallel form with patronymic Gu*n*a. In that case Orthros, if not V*ri*tra himself, would be one of his manifold offspring, a Vartra; though there is no necessity whatever for that.

But such is the zeal excited by the equation Orthros = V*ri*tra that his very droit d'existence has been denied. And why? Because in one passage where his name occurs in Hesiod, the MSS. vary between Orthos and Orthros. But has it been quite forgotten that there are other passages[1] in ever so many mythological writers where his name occurs? What would become of its many relatives, such as ὀρθροβόας, ὀρθρογόη, ὄρθριος, ὀρθρίδιος, ὀρθρινός, τὸ ὀρθρινόν, ὀρθρεύω, ὀρθρίζω? Are they all to be deprived of their r and to be derived from ὀρθός, to satisfy the tender conscience of unpitiful, classical scholars? That one ignorant copyist, not knowing much about Orthros, should write the more familiar ὀρθός instead of ὄρθρος is natural enough. It is the lectio facilior. But that a copyist who never heard of V*ri*tra, should have invented such a name as Orthros in order to substitute it for the perfectly familiar ὀρθός, is more than we can be expected to believe. Besides, does any scholar imagine that the existence of Orthros depends on this single passage? All mythologists know that Orthros is a very substantial perso-

[1] Apollod. ii, 5, 10, φύλαξ δὲ Ὄρθρος ὁ κύων δικέφαλος ἐξ Ἐχίδνης καὶ Τυφῶνος γεγενημένος.

nality, and those who study Greek vases are not unacquainted with his personal appearance, though, so far as I know, neither Orthos nor Orthros occurs in any of the Greek vase inscriptions. But though it is easy enough to defend Orthros against his phonetic critics, it is not so easy to explain how the original idea expressed by the Vedic V*ri*tra could have been realised once more in the Greek Orthros. Let us remember then that in the Veda V*ri*tra represents the darkness, whether of the thunderstorm or of the night, and that in both capacities, as the dark demon of the thunder-cloud and of the night, V*ri*tra is overcome by the gods of light and of the morning. Thus the first moment of the morning would be the last moment of V*ri*tra, the morning would be the defeat of V*ri*tra and the triumph of the luminous hero. Instead of saying, 'the night is over,' people would have said, 'V*ri*tra is overthrown,' or 'Orthros has been slain' by Hêrakles, and the time of the last gasp of the night might well have been called ὄρθρος (das Morgengrauen). Braun in his Griechische Mythologie (§ 588) seems to have no doubt on this subject, for he translates Orthros by Frühauf (Up-early), and Gerhard points out that Orthros means the brightness of the morning. Liddell and Scott render Orthros by 'the time just before or about daybreak.' And hence ὀρθροβόας, the cock, ὀρθρογόη, the swallow. This ought to suffice to show that Orthros is not the invention of comparative philologists.

In Comparative Mythology we must remember that a deity not only noscitur a socio, but likewise noscitur ab inimico. Now the enemy of Orthros as well as of Kerberos is Hêrakles, and if there is a

hero whose original solar character has never been doubted, even by the most determined Euhemerists, it is surely Hêrakles. Hêrakles, therefore, on his return from Hades may very properly be said to have dragged the monster of darkness, the dog of the night, to the light of day, if only for a short time as in the case of Kerberos, or actually to have killed the representative of nocturnal darkness as in the case of Orthros.

Recapitulation.

I am quite aware that my view of the true nature of phonetic rules will give great offence. It is so pleasant to be self-righteous, and so easy to misrepresent the motives of any plea in favour of what is certain to be called phonetic licence. I myself am by no means ignorant of the dangers of such a view as I have here ventured to propose, and I must confess that in former years I was myself one of the straitest sect of phonetic pharisees. But facts are facts, and one must live and learn. There will always remain a strong public opinion against phonetic laxity, and scholars will insist on very strong arguments before they make the slightest concession with regard to ill-supported phonetic changes. But such equations as Varu*n*a = Ouranos, Ahanâ = Athêne, Dahanâ = Daphne, will not succumb to mere shakings of the head; and even if they were more vulnerable phonetically than they really are, they would stand by the undeniable similarities of their mythological character.

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